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The Perceived Impact of Professional Learning Communities on Collective Teacher Efficacy in Two Rural Western North Carolina School Districts

Katie Thompson Bailey
Gardner-Webb University

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By
Katie Thompson Bailey

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Approval Page

This dissertation was submitted by Katie Thompson Bailey under the direction of the persons listed below. It was submitted to the Gardner-Webb University School of Education and approved in partial fulfillment of the requirements for the degree of Doctor of Education at Gardner-Webb University.

John Balls, Ed.D. Committee Chair	Date
Ronald Garner, Ed.D. Committee Member	Date
Aaron Greene, Ed.S. Committee Member	Date
Jeff Hamilton, Ed.D. Committee Member	Date
Jeffrey Rogers, Ph.D. Dean of the Gayle Bolt Price School of Graduate Studies	Date

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Abstract

The Perceived Impact of Professional Learning Communities on Collective Teacher Efficacy in Two Rural Western North Carolina School Districts. Katie Thompson Bailey, 2016: Dissertation, Gardner-Webb University, Gardner-Webb School of Education. Professional Learning Communities/Collective Teacher Efficacy/Teacher Efficacy/Teacher Dispositions/Supportive Conditions/Dimensions of a PLC

The purpose of this study was to examine the perceived impact of professional learning communities (PLCs) on collective teacher efficacy in two rural western North Carolina school districts. The theoretical framework for this study began with the assumption that there was a direct linkage between PLCs and collective teacher efficacy.

The Professional Learning Communities Assessment-Revised (PLCA-R) survey instrument was utilized to collect data in two rural western North Carolina school districts. An elementary, middle, and high school from each district were involved in the study. Through the use of the PLCA-R, 95 total responses were obtained. In an attempt to triangulate the data to ensure validity and reliability, interview and focus-group sessions were conducted. At the conclusion of data collection, the data were analyzed using descriptive techniques.

According to the results of this study, the six identified dimensions on the PLCA-R have a positive impact on collective teacher efficacy at all levels, especially at the elementary level. The researcher recommends that teachers and administrators within both districts continue educating themselves on the PLC concept and improving their PLCs' practices.

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Chapter 1: Introduction

Introduction

Numerous researchers have found the professional learning community (PLC) model provides an "effective, learning-focused process" that can foster improvement in teaching and student learning (Pirtle & Tobia, 2014, p. 1). According to Pirtle and Tobia (2014), the infrastructure created by PLCs is powerful (p. 1). The infrastructure provides teachers the opportunity to engage in meaningful dialogue, reflect on practice, improve instruction, and become more effective to improve student learning (Pirtle & Tobia, 2014, p. 1).

Berry, Daughtrey, and Wieder (2009) contended that teachers are most effective when given the time and tools to collaborate with peers (p. 1). Research indicates that collaborative teachers are effective teachers (Berry et al., 2009, p. 2). Teacher collaboration has been associated with higher teacher satisfaction and higher student achievement (Claycomb, n.d., p. 1). Students benefit when teachers work together to promote student learning (Danielson, 2002, p. 44). Collaboration is a key component to teacher morale (LaPrade, n.d., p. 2).

PLCs have been associated with increased teacher morale (Burns, Jimerson, & VanDerHeyden, 2007, p. 92). Research shows that when teacher empowerment increases, teacher morale also increases (Gardner-Webb University, n.d.). Balls, Eury, and King (2012) referred to empowerment as an attitude (p. 17). Teacher efficacy improves when an attitude of empowerment exists (Balls et al., 2012, p. 17). After extensive research, teacher efficacy has been identified as "a simple idea with significant implications" (Tschannen-Moran & Woolfolk-Hoy, 2001, p. 783). According to LaPrade (n.d.), PLCs address the problem of teachers working in isolation (p. 2). As teacher

isolation decreases, teacher morale and collegiality increase which have a positive impact on teacher efficacy (LaPrade, n.d., p. 3). In order to build efficacy, mindsets must change (Balls et al., 2012, p. 17). "The most effective teachers perceive themselves as effective" (Balls et al., 2011, p. 17). Effective teachers are self-confident and have the ability to relate with a broad range of people (Balls et al., 2011, p. 17). Leadership capacity is developed and nurtured in PLCs (Hipp & Huffman, 2010, p. 138). Teachers who participate in PLCs believe that together they can impact student learning, and this becomes evident as students continuously showcase increased student learning (Hipp & Huffman, 2010, p. 138). According to Hipp and Huffman (2010), "As individuals, if we believe we can accomplish something together, we often find we can and do" (p. 138).

According to Burns et al. (2007), several researchers have documented changes in teacher attitudes after participating in PLCs such as an increase in self-confidence and efficacy, willingness to collaborate, and openness to try new practices (p. 92). Teachers who participate in PLCs showcase lower rates of absenteeism and express greater job satisfaction (Burns et al., 2007, p. 92). According to a report released by the National Council of Teachers of English (NCTE), PLCs enhance teacher quality, improve student learning, and increase teacher retention (Squire, 2010, p. 1). Vracar (2015) recognized the environment of a PLC as a key factor in enhancing teacher quality (p. 2). PLCs improve teacher quality by providing educators with opportunities to connect, engage, and collaborate with one another (Vracar, 20015, p. 2). It is through this process that teachers recognize areas of improvement (Vracar, 2015, p. 2). Squire (2010) identified teacher quality as the most important factor in enhancing student achievement (p. 1). According to Policy Studies Associates for the Center for Public Education (2006), the most significant gains in student achievement occur when students receive instruction by

good teachers over consecutive teachers (p. 1). Teachers who participate in PLCs are more likely to demonstrate and model the concept of lifelong learning which ultimately enhances student learning (Squire, 2010, p. 3). In addition, Squire (2010) stated that teachers who participate in PLCs create norms consistent with the goals of the school and district, making learning expectations more straightforward and clear for all students (p. 3).

By enhancing teacher quality, the PLC model has been recognized as an aide in teacher retention (Vracar, 2015, p. 2). Beginning teachers have cited that the relationships established in PLCs impacted their decision to stay in the education profession (Vracar, 2015, p. 2). The coaching received from a mentor in a PLC has been described as valuable (Huffman & Hipp, 2003, p. 54). A school's approach to mentoring new teachers provides opportunities for professional growth (Danielson, 2002, p. 63). Danielson (2002) emphasized the complexity of teaching when discussing the importance of mentoring and argued that all new teachers benefit from structured support (p. 63). Teachers could benefit from supports that build and shape their self-efficacy (Bruce & Ross, 2008). Researcher Cassandra Guarino and associates analyzed federal Schools and Staffing Surveys in 2006 and found schools with mentoring programs that emphasized collegial support showcased lower turnover rates among beginning teachers (McClure, 2008, p. 1). Mentoring aids in building a trusting atmosphere, which is supportive of the PLC model (Huffman & Hipp, 2003, p. 55). Through PLCs, teachers share ideas and provide feedback on instructional practices in order to improve student achievement (Huffman & Hipp, 2003, p. 55). Once trust is developed, teachers become more accepting to new ideas and suggestions (Huffman & Hipp, 2003, p. 55). Research shows that every teacher can learn from colleagues and improve their practice (Danielson, 2002,

p. 96). According to a research brief by Breakthrough Collaborative (2012), the structure of the PLC model forces teachers to work in teams, which ultimately promotes deep team learning (p. 1). Teachers are more likely to remain in the profession when they receive this type of support (Danielson, 2002, p. 64). A study of 125 new teacher support programs in California reported a retention rate of 93% for first- and second-year teachers, which shows that attrition rates for beginning teachers with mentors are much lower than for those without this type of support program (Danielson, 2002, p. 64). Experienced teachers who serve as mentors benefit from mentoring as well (Danielson, 2002, p. 64). According to Danielson, the professional conversations that occur throughout a mentoring program promote a culture of inquiry within the school (p. 64). Decisions are impacted by the quality of conversations (Balls et al., 2011, p. 71). PLCs provide a collaborative atmosphere in which teachers feel more connected and committed to the school which results in higher teacher retention rates (Squire, 2010, p. 2).

Statement of the Research Problem

Research shows that job satisfaction among teachers is decreasing with approximately one in three teachers considering leaving the profession (DuFour & Fullan, 2013, p. 4). Teachers leave the profession primarily because they feel alone and isolated (Squire, 2010, p. 2). Schools have been described as lonely places even though they are full of people (Lyons & Pinnell, 2001, p. 186). Gaikwad and Brantley (1992) described teacher isolation as a paradox because of this (p. 14). There are too few opportunities for teachers to share practices and experiences aimed at strengthening collective teacher efficacy within the school setting (Balls et al., 2011, p. 24). According to Vracar (2015), approximately half a million teachers leave the profession annually (p. 2). Teachers spend only 3% of their day collaborating with colleagues according to a

recent study by Scholastic and the Gates Foundation (Goldin & Mirel, 2012, p. 2). The study indicates the majority of American teachers are working in isolation (Goldin & Mirel, 2012, p. 2). Historically, teaching has been recognized as an isolated profession (Mindich & Lieberman, 2012, p. 3). Mindich and Lieberman (2012) contended that teacher isolation is related directly to the structure of a school (p. 4). Schools that provide few opportunities for teachers to collaborate and work together will showcase higher rates of teacher isolation (Mindich & Lieberman, 2012, p. 4). Studies show that teacher isolation is a widespread problem (Gaikwad & Brantley, 1992, p. 14). Teachers' attitudes and energy levels are negatively impacted by isolation (Gaikwad & Brantley, 1992, p. 15). Research indicates that teacher isolation is likely to result in burnout (Gaikwad & Brantley, 1992, p. 15). Peterson (1992) emphasized that learning cannot occur in a vacuum (p. 79). Similarly, school improvement cannot be done in a vacuum due to the number of people it affects (Lezotte & McKee, 2002, p. 7). DuFour and Fullan (2013) emphasized that schools cannot achieve the fundamental purpose of learning for all if educators work in isolation (p. 14). In order to support student and adult learning, educators must build a collaborative culture in which they work together interdependently and hold themselves responsible and accountable for the learning of all students (DuFour & Fullan, 2013, p. 15). Learning is enhanced through encounters with others (Peterson, 1992, p. 80). It is through these encounters that people determine what is of value (Peterson, 1992, p. 80). Teachers feel less isolated in an atmosphere where collaborative learning occurs (Bilash, 2009, p. 2). Research suggests that an atmosphere that fosters collaboration can improve teacher retention and teacher satisfaction (McClure, 2008, p. 2). In a recent study, schools that had success in going from good to great relied on collaborative practices and focused on creating conditions that supported

meaningful teamwork (DuFour & Fullan, 2013, p. 67). "When all teachers in a school engage intentionally and continuously in the learning process, rather than in isolated pockets and in uncoordinated efforts, the capacity of the school to solve problems and maintain focus and commitment is powerfully enhanced" (Huffman & Hipp, 2003, p. 77).

Collaboration has been recognized as a key element of the instructional model in other countries such as Finland and Japan where students are known for outperforming those in the United States (Goldin & Mirel, 2012, p. 2). The PLC model creates structures that promote a collaborative culture which leads to higher levels of student achievement (DuFour, 2004, pp. 6-11). DuFour and Eaker (1998) argued that structures are critical in changing the culture of a school. Teacher collaboration is a catalyst for teacher improvement (Heick, 2013, p. 2). A collaborative culture increases teacher morale (Burns et al., 2007, p. 92). Research indicates that teacher morale impacts student achievement (Podsen, 2002, p. 9). Teachers are empowered by results that showcase improvement which enhance teacher morale (LaPrade, n.d., p. 3). According to Podsen (2002), when teacher morale is high, student achievement is typically higher; but when teacher morale is low, achievement levels decline (p. 9).

School leaders are continually seeking out opportunities to improve the quality of the educational system. The connection between school improvement and PLCs is becoming more evident through research (Huffman & Hipp, 2003, p. xvi). The success rate and effectiveness of the PLC model has been recognized by an increasing number of schools and organizations (Schmoker, 2004, p. 88). PLCs are one of the most talked about reforms in education today (LaPrade, n.d., p. 1). According to DuFour and Eaker (1998), "The best hope for significant school improvement is transforming schools into professional learning communities" (p. 17). The PLC process engages dialogue among

members by creating a collaborative environment. According to DuFour and Mattos (2013), "in a professional learning community, principals and teachers engage in collective inquiry to decide on the work that will most benefit their students" (p. 38). Through collective inquiry, members of a PLC develop new skills and capabilities which turn into new experiences and awareness (DuFour, DuFour, Eaker, & Many, 2010, p. 12). Attitudes, beliefs, and habits gradually begin to change from this heightened awareness (DuFour, DuFour, Eaker, & Many, 2010, p. 12).

Research shows that the gaps in communication and understanding make it difficult to sustain reforms (Johnson, 2013, p.19). In order to improve and develop more meaningful education reforms, we must widen the circle of dialogue to include all stakeholders (Johnson, 2013, p. 17). Schools should expect everyone to be engaged in the learning process (Danielson, 2002, p. 9). Advancing student learning should be the focus of the relationship that exists between a school and its stakeholders (Danielson, 2002, p. 67). Teachers who work collaboratively with all stakeholders are more likely to improve their professional practice and student learning (Danielson, 2002, p. 27). Communication is essential when schools build relationships with the community and stakeholders (Danielson, 2002, p. 68). According to Johnson (2013), "Few people change their expectations or behavior on the basis of information alone" (p. 19). Yankelovich (2001) emphasized the importance and effectiveness of dialogue. Peterson (1992) referred to dialogue as a special kind of talk where the focus is on learning (p. 103). Dialogue is "the step we can take, before decisions are made, to uncover assumptions, broaden perspectives, build trust, and find common ground" (Rosell & Gantwerk, 2011, p. 112). In dialogue, people have the opportunity to share their thoughts and suggestions which ultimately improve the end result. Dialogue occurs when people

share a common interest and join together to gain understanding and construct meaning (Peterson, 1992, p. 104). Danielson (2002) identified teachers committed to their profession as those who engage in serious discussions about their practice (p. 9). Research suggests a positive relationship between teacher collaboration and student achievement (McClure, 2008, p. 1). Establishing a collaborative culture is vital to the health and life of a school (Lyons & Pinnell, 2001, p. 7).

Since research indicates PLCs have a positive impact on student learning and achievement, further research needs to be conducted in order to determine if a relationship exists between PLCs and collective teacher efficacy (Hord, 1997, pp. 26-27).

Purpose of the Study

The purpose of this study was to examine the perceived impact of PLCs on collective teacher efficacy in two rural western North Carolina school districts. The study sought to identify teacher and administrator perceptions with respect to the impact PLCs have on collective teacher efficacy. The researcher identified the effectiveness of collective learning in the PLC model as identified in the Professional Learning Communities Assessment-Revised (PLCA-R). Throughout the study, the researcher identified the impact supportive conditions within PLCs as identified in the PLCA-R have on collective teacher efficacy.

Through a survey, interviews, and focus groups, the researcher sought to identify the dimension of a PLC as identified in the PLCA-R that teachers found to be the most impactful. The study sought to identify any challenges that were experienced at the school level in implementing a PLC. In addition, the researcher sought to identify differences in teacher perceptions with respect to the impact PLCs have on collective teacher efficacy between two rural counties in western North Carolina. Finally, the study

examined any significant differences among the demographic groups with respect to the impact PLCs have on collective teacher efficacy.

Context for Study

Numerous attempts of school reforms have been documented throughout the history of American education. "Surveys and focus groups have repeatedly shown that many Americans still have concerns and questions about education reform as it has unfolded over the last decade" (Johnson, 2013, p. 17).

In 1957, with the launching of Sputnik, the public school system was cited as the primary cause for the United States falling behind Russia in the race to space. Many citizens believed that *educationists* had *dumbed down* the curriculum (DuFour & Eaker, 1998, p. 2). Critics later argued that the public school system was responsible for America's loss of economic power to Japan (DuFour & Eaker, 1998, p. 2).

The National Commission on Excellence in Education captured national headlines with its report, *A Nation at Risk,* in 1983. The public school system was targeted once again and accused of the reason national security was in danger (DuFour & Eaker, 1998, p. 2). School improvement initiatives began to generate and spread throughout the United States and became known as the Excellence Movement. The movement intensified existing reform practices without offering any new ideas. Upon reflection of the reform efforts that the movement brought about, the United States Department of Education found no significant accomplishments or progress (DuFour & Eaker, 1998, p. 4).

The Restructuring Movement was established with an emphasis on site-based reform after the failure of the Excellence Movement (DuFour & Eaker, 1998, p. 6). The movement freed educators from the "shackles of top-down mandates and bureaucratic

rules and regulations" (DuFour & Eaker, 1998, p. 7). Educators were given the authority to initiate and oversee change within their schools. DuFour and Eaker (1998) stated, "The high hopes of the Restructuring Movement have yet to be realized" due to the fact that educators have "typically elected to focus on marginal changes rather than on core issues of teaching and learning" (p. 8).

Due to the number of unsuccessful reform efforts, public concern has continued to increase since the 20th century (DuFour & Eaker, 1998, p. 1). Oftentimes, teachers respond to reform initiatives with resignation because experience has taught them that "this too shall pass" (DuFour & Eaker, 1998, p. 14). "As one battle-scarred veteran teacher summarized his experience, 'Everything has changed, but nothing is different'" (DuFour & Eaker, 1998, p. 14). Schlechty (1997) believed that the number of unsuccessful reform efforts have been destructive to the public educational system. According to DuFour (2004), educators can avoid this cycle if they reflect critically on the characteristics that make up the PLC model (p. 6). Educators need to have an understanding of the main ideas that represent the core principles of the PLC model (DuFour, 2004, p. 6). Balls et al. (2011) referred to PLCs as organisms that evolve and grow with experiences (p. 77). It is evident when schools possess the characteristics of a PLC (Claycomb, n.d., p. 2). Educators in a PLC environment report reduced feelings of isolation, increased commitment to the shared vision and goals of the school, more openness to the concept of school change, higher rates of job satisfaction, and lower rates of absenteeism (Claycomb, n.d., p. 2). In schools where teaching and interacting with students are done primarily in isolation, teachers are more likely to be threatened by the suggestion of observing another colleague at work (Danielson, 2002, p. 9). Some would even view it as an indication of deficiency (Danielson, 2002, p. 9). According to Bilash

(2009), teachers who work in isolation are often territorial of their classrooms and prefer to work unsupervised and uninterrupted (p. 2). When teachers work in isolation, they often forget that their actions affect everyone else in the school to some degree (Lezotte & McKee, 2002, p. 9). In schools that function as PLCs, teachers are more likely to identify areas for improvement within their practice and ask to observe colleagues in action in order to learn from them (Danielson, 2002, p. 9). It is within these schools that teachers are recognized as professional resources (Danielson, 2002, p. 9). According to Patterson, Grenny, Maxfield, McMillan, and Switzler (2013), behavior is shaped powerfully by observing others (p. 18). Researchers have recognized the concept of PLCs as the promise for school change and lasting reform (Hipp & Huffman, 2010, p. 12).

Characteristics of PLCs

In order for schools to become significantly more effective, a model must be embraced that allows everyone to function as learning organizations (DuFour & Eaker, 1998, p. 15). The PLC model consists of six elements: (1) shared mission, vision, and values; (2) collective inquiry; (3) collaborative teams; (4) an orientation towards action and a willingness to experiment; (5) commitment to continuous improvement; and (6) a focus on results (DuFour & Eaker, 1998, p. 45). Schools that function as PLCs are structured in a manner that supports this model (DuFour & Eaker, 1998, p. 45).

1. **Shared mission, vision, and values.** DuFour and Eaker (1998) described the mission, vision, and values as integral components of a PLC (p. 25). Lezotte and McKee (2002) contended that effective school improvement is created by the passion that is grounded in the school mission (p. 119). Structures that support the mission, vision, and values of the school are critical to the quality of classroom teaching (Heaton, 2013, p.

23). The building of a collaborative vision has been recognized as the initial challenge for PLCs (Hipp & Huffman, 2010, p. 16). According to Hipp and Huffman (2010), a vision for school improvement emerges when there is a focus on student learning (p. 16). Schools that lack a common vision are unlikely to achieve desired outcomes (Hipp & Huffman, 2010, p. 16).

2. Collective inquiry. Collective inquiry has been recognized as the "engine of improvement, growth, and renewal" in a PLC (DuFour & Eaker, 1998, p. 25). It is through the process of collective inquiry that members of PLCs learn how to learn together (DuFour, DuFour, Eaker, & Many, 2010, p. 7). Hipp and Huffman (2010) emphasized that when building a PLC, a school must be dedicated to the process of inquiry and learning (p. 17).

3. Collaborative teams. The structure of the PLC is created by a group of collaborative teams that share a common purpose (DuFour & Eaker, 1998, p. 26). The team has been identified as the engine and building block of a PLC (DuFour, DuFour, Eaker, & Many, 2010, p.11). Collaboration is essential in a PLC.

4. Action-based. PLCs are action-based (DuFour & Eaker, 1998, p. 27). Team members value action, engagement, and experience (DuFour, DuFour, Eaker, & Many, 2010, p. 12). Aspirations are turned into action and visions into reality (DuFour & Eaker, 1998, p. 27). Members of a PLC value engagement and experience (DuFour & Eaker, 1998, p. 27). Due to this, members do not accept or tolerate inaction (DuFour & Eaker, 1998, p. 27).

5. Continuous improvement. The members of a PLC are committed to continuous improvement. Lezotte and McKee (2002) referred to continuous improvement as an attitude (p. 35). Excellence is always a goal and never a destination

(Lezotte & McKee, 2002, p. 9). Innovation and experimentation are viewed as ways of conducting day-to-day business (DuFour & Eaker, 1998, p. 28). According to DuFour and Eaker (1998), members of a PLC must continually revisit and reflect on the fundamental purpose (p. 28). It is essential that members know what they hope to achieve in order to develop strategies for becoming better (DuFour & Eaker, 1998, p. 28). PLCs pursue next-generation innovations (DuFour & Fullan, 2013, p. 76). It is the responsibility of the members of a PLC to identify criteria that will be used to assess improvement efforts (DuFour & Eaker, 1998, p. 28). Continuous improvement is a never-ending commitment (DuFour & Eaker, 1998, p. 28). According to DuFour and Eaker, the mission and vision are ideals that will never be fully realized but will always be worked toward (p. 280). Lezotte and McKee referred to continuous improvement as a journey and never a destination (p. 42). The recommended continuous improvement cycle consists of four steps: studying, reflecting, planning, and doing (Lezotte & McKee, 2002, p. 42). Continuous improvement is a never-ending cycle of self-examination and adjustment (Lezotte & McKee, 2002, p. ix). Effective schools and districts continually ask "how are we doing," "what can we do better," and "how can we better serve our students" in order to make adjustments and continually improve (Lezotte & McKee, 2002, p. ix). According to Harvey and Daniels (2009), proficient collaborators reflect and correct (p. 46). Professional growth occurs through reflection and experience (Balls et al., 2011, p. 14). Learning and insight occur throughout the process of reflecting on experiences (Costa & Kallick, 2008). Research suggests that reflective practice is enhanced when it is done collaboratively (Costa & Kallick, 2008). School improvement must be an inclusive and collaborative process (Lezotte & McKee, 2002, p. 7). According to DuFour and Fullan (2013), in order to sustain an improvement process,

leaders must create a collaborative culture that emphasizes collective responsibility for achieving goals (p. 44). Providing time for collaboration and PLCs is one of the most vital resources leaders can provide to those attempting to create a culture of continuous improvement (DuFour & Fullan, 2013, p. 68). The results of a recent study showed a positive relationship between teacher reflective practice and teacher efficacy (Noormohammadi, 2014, p. 1380).

6. Results-oriented. Members of a PLC understand that all actions and efforts must be results-oriented (DuFour & Eaker, 1998, p. 29). Data are recognized as essential components of the continuous improvement process (DuFour, DuFour, Eaker, & Many, 2010, p. 197).

DuFour and Eaker (1998) contended that learning organizations should be characterized as PLCs with the emphasis being on community (p. 15). "While the term 'organization' suggests a partnership enhanced by efficiency, expediency, and mutual interests, 'community' places greater emphasis on relationships, shared ideals, and a strong culture – all factors that are critical to school improvement" (DuFour & Eaker, 1998, p. 15).

Collective Teacher Efficacy

The three structures that support collective teacher efficacy are time, facilities, and resources (Balls et al., 2012, p. 29). Teachers must be provided opportunities to plan and meet with peers in order to model and share best practices (Balls et al., 2012, p. 29). It is during this time that teachers grow professionally and learn how to provide students with high-quality instruction (Balls et al., 2012, p. 29). In order to maximize student and teacher learning, facilities within the school must be utilized (Balls et al., 2012, p. 29). Appropriate resources should be available for teachers in order to support their efforts in

maximizing student learning (Balls et al., 2012, p. 29).

Teachers must believe they can produce valued results by collective action and inquiry before they can fully understand the power of collective efficacy (Bandura, 1997). Unlike self-efficacy, collective efficacy is associated with the performance capabilities of whole groups (Bandura, 1997, p. 469). Increased self-efficacy leads to increased collective efficacy (Balls et al., 2011, p. 74). Balls et al. (2011) contended that collective dispositions have the greatest impact on self-efficacy (p. 84). "Improving the individual and collective disposition results in a self-sustaining level of continuous refinement of the collective ability of the group" (Balls et al., 2011, p. 83). Research indicates a direct linkage between positive dispositions and high student achievement (Balls et al., 2011, p. 17). According to Balls et al. (2011), the most effective teachers perceive themselves as effective, believe all students can learn, see a larger purpose for what they do, and understand the importance of the people element (p. 17).

According to Bandura (1997), collective efficacy is the shared belief among all members of a group in its capability to organize and implement necessary courses of action required to produce expected results (p. 477). Goddard, Hoy, and Woolfolk Hoy (2000) referred to collective efficacy as the perceptions of teachers in a school that the efforts of the faculty as a whole will have positive effects on student achievement and learning.

Research indicates that collective efficacy impacts school-level achievement (Bandura, 1997, p. 469). According to Bandura (1997), schools that flourish academically are the ones that have staff members who exhibit a strong sense of collective efficacy (p. 469). Schools decline academically when staff members have doubts regarding their collective efficacy (Bandura, 1997, p. 469). "The higher the sense

of collective efficacy, the better the team performance" (Bandura, 1997, p. 470). According to Protheroe (2008), administrators have the opportunity to build collective teacher efficacy (p. 44). Administrators are in a position to build collective efficacy through the experiences they provide for teachers (Protheroe, 2008, p. 45). Teachers with higher levels of efficacy operate under leaders who model behaviors such as risk taking and cooperation and ultimately inspire group purpose (Protheroe, 2008, p. 45). In order to improve student achievement, research suggests administrators focus on increasing the collective teacher efficacy beliefs of their faculties (Protheroe, 2008, p. 45).

Definition of Terms

The following terms are used throughout the study.

PLCs. In education, the term PLC has become overused to the point the term's meaning is often lost (Pirtle & Tobia, 2014, p. 1). There is no universal definition of a PLC. The following definitions offer a range of ways to describe a PLC.

1. An environment created by educators that fosters cooperation, support, and growth as everyone works together to achieve a goal that cannot be accomplished alone (DuFour & Eaker, 1998).
2. A continuous process in which educators work collaboratively in recurring cycles of collective inquiry and action research to improve student achievement and learning (DuFour, DuFour, Eaker, & Many, 2010).
3. An approach to engaging educators in meaningful learning which can lead to increased student achievement (Huffman & Hipp, 2003).

Collective teacher efficacy. The following definitions offer a range of ways to describe collective teacher efficacy.

1. The perceptions of teachers in a school that the efforts of the faculty as a

whole will have positive effects on student achievement and learning (Goddard et al., 2000).

2. The shared belief among all members of a group in its capability to organize and implement necessary courses of action required to produce expected results (Bandura, 1997, p. 477).

Teacher efficacy. The following definitions offer a range of ways to describe teacher efficacy.

1. Teachers' beliefs about their capabilities to impact student motivation and achievement (Wagner, 2008).
2. Teachers' confidence in their abilities to execute required courses of action to successfully accomplish a specific task (Tschannen-Moran, Woolfolk-Hoy, & Hoy, 1998).

Teacher dispositions. The following definitions offer a range of ways to describe teacher dispositions.

1. The values, commitments, and professional ethics that influence behaviors toward stakeholders which directly affect student learning, motivation, development, and professional growth (Balls et al., 2011, p. 80).
2. One's beliefs and one's value system (Balls et al., 2011, p. 19).

Supportive conditions. The following definitions offer a range of ways to describe supportive conditions.

1. Two types of conditions are necessary to build effective professional learning communities: the people capacities (human capital) of those involved and the structural/physical conditions. These supportive conditions support the work of teachers and administrators by providing time and opportunities to

communicate regularly, plan collaboratively, problem solve, and learn together (Huffman & Hipp, 2003, p. 12).

2. School conditions and capacities that support the work of teachers and administrators within a professional learning organization (Hipp & Huffman, 2010, p. 19).

Research Questions

The research questions that guided the framework for this study were as follows.

1. What are teachers' and administrators' perceptions on the impact PLCs have on collective teacher efficacy?
2. What are teachers' and administrators' perceptions on the effectiveness of collective learning within a PLC?
3. What impact do supportive conditions within PLCs have on collective teacher efficacy?

Significance of the Study

This study focused on examining and determining the relationship between PLCs and collective teacher efficacy. Since research indicates PLCs have a positive impact on student learning and achievement, further research was needed to determine if a relationship exists between PLCs and collective teacher efficacy (Hord, 1997, pp. 26-27). Throughout the study, the researcher sought to determine the impact supportive conditions within PLCs have on collective teacher efficacy. The researcher examined and determined the perceived impact of PLCs on collective teacher efficacy in two rural school districts and whether there was a significant difference by demographic group within the study groups.

Delimitations of Study

Research for this study was conducted in two rural school districts in western North Carolina. An elementary, middle, and high school from each district were involved in the study. The study was limited to participating teachers and administrators (school level and district office) from each school involved in the study. For consistency and validity purposes, only teachers in Grades Kindergarten through 4 were asked to participate in the study at the elementary schools. Only certified teachers and administrators were asked to participate in the survey, interviews, and focus groups.

School District A served approximately 2,500 students in Grades Prekindergarten through 13, which includes an early college. The population involved in this study included approximately 151 teachers and seven administrators.

School District B served approximately 1,950 students in Grades Prekindergarten through 12. The population involved in this study included approximately 92 teachers and five administrators.

Summary

The purpose of this study was to examine the perceived impact of PLCs on collective teacher efficacy in two rural western North Carolina school districts. According to Squire (2010), PLCs enhance teacher quality, improve student learning, and increase teacher retention (p. 1). In addition, PLCs have been associated with increased teacher morale (Burns et al., 2007, p. 92). Teachers who participate in PLCs, showcase lower rates of absenteeism and express greater job satisfaction (Burns et al., 2007, p. 92). By enhancing teacher quality, the PLC model has been recognized as an aide in teacher retention (Vracar, 2015, p. 2). The infrastructure created by PLCs is powerful (Pirtle & Tobia, 2014, p. 1). Berry et al. (2009) contended that teachers are most effective when

given the time and tools to collaborate with peers (p. 1). Collaborative teachers are effective teachers (Berry et al., 2009, p. 2).

Numerous attempts of school reforms have been marked throughout the history of American education. Public concern has continued to increase since the 20th century due to the number of unsuccessful reform efforts (DuFour & Eaker, 1998, p. 1). Schools are continually seeking out opportunities to improve the quality of the educational system.

The connection between school improvement and PLCs is becoming more evident through research (Huffman & Hipp, 2003, p. xvi). The PLC model is structured in a manner that encourages everyone to function as learning organizations which allows schools to become significantly more effective (DuFour & Eaker, 1998, p. 15). The infrastructure created by PLCs provides teachers with the opportunity to engage in meaningful dialogue (Pirtle & Tobia, 2014, p. 1). Research shows that collaborative teachers are effective teachers (Berry et al., 2009, p. 2). The PLC model creates structures that promote a collaborative culture which leads to higher levels of student achievement (DuFour, 2004, pp. 6-11). Collaboration is a key component to teacher morale (LaPrade, n.d., p. 2).

Teachers must believe they can produce valued results by collective action and inquiry before they can fully understand the power of collective efficacy (Bandura, 1997). Increased self-efficacy leads to increased collective efficacy (Balls et al., 2011, p. 74). Collective dispositions have the greatest impact on self-efficacy (Balls et al., 2011, p. 84). Collective efficacy has a direct impact on school-level achievement (Bandura, 1997, p. 469). The most effective teachers perceive themselves as effective, believe all students can learn, see a larger purpose for what they do, and understand the importance of the people element (Balls et al., 2011, p. 17). According to Henson (2001), a strong

sense of efficacy is “perhaps one of the best documented attributes of effective teachers” (p. 404).

Research shows that job satisfaction among teachers is decreasing (DuFour & Fullan, 2013, p. 4). Teachers leave the profession primarily because they feel alone and isolated (Squire, 2010, p. 2). Research suggests that an atmosphere that fosters collaboration can improve teacher retention and teacher satisfaction (McClure, 2008, p. 2). In order for schools to become significantly more effective, a model must be embraced that allows everyone to function as learning organizations (DuFour & Eaker, 1998, p. 15).

This study focused on examining and determining the relationship between PLCs and collective teacher efficacy. Since research indicates PLCs have a positive impact on student learning and achievement, further research was needed in order to determine if a relationship exists between PLCs and collective teacher efficacy (Hord, 1997, pp. 26-27).

Chapter 2: Literature Review

History and Development of PLCs

The purpose of this study was to examine the perceived impact of PLCs on collective teacher efficacy in two rural western North Carolina school districts. In order for schools to become more effective, researchers from a variety of fields contend that a model must be embraced that enables them to function as learning organizations or PLCs (DuFour & Eaker, 1998). PLCs are unique to the community they represent, which is why no two PLCs are the same (LaPrade, n.d., p. 2). Research suggests that the transformation of a school into a PLC offers the most hope for significant improvement (DuFour & Eaker, 1998, p. 17). "Professional learning communities are our best hope for reculturing schools" (DuFour, DuFour, & Eaker, 2002, p. 9). Toole and Louis (2002) contended that PLCs lead to improved school functioning in most settings (p. 274). PLCs prove to be most effective when they are focused on teaching and learning (Mitchell & Sackney, 2009).

PLCs operate by using a common vocabulary. Kegan and Lahey (2001) contended that the transformation process requires a new language (p. 7). Each word in the phrase "professional learning community" has a significant meaning. According to DuFour and Eaker (1998),

> A *professional* is someone with expertise in a specialized field, an individual who has not only pursued advanced training to enter the field, but who is also expected to remain current in its evolving knowledge base. *Learning* suggests ongoing action and perpetual curiosity. *Community* suggests a group linked by common interests. (pp. xi-xii)

These three characteristics should exist within a PLC. The process should be one that is

continuous and never-ending (DuFour, DuFour, Eaker, & Many, 2010, p. 10). The environment of a PLC fosters mutual cooperation, emotional support, and personal growth (DuFour & Eaker, 1998, p. xii). Individuals work together as a team to accomplish more than they could alone, which creates the synergistic effect that PLCs have. The most effective team structure is one that involves a team of teachers who share a commonality such as teaching the same course or grade level (DuFour, DuFour, Eaker, & Many, 2010, p. 121). Lezotte and McKee (2002) emphasized the importance of teamwork and referred to it as a critical component for successful change within a school (p. 9). By working together in teams, teachers feel empowered to make important decisions, support one another, and learn from one another (DuFour & Fullan, 2013, p. 15). Teamwork supports *learning* together, which the PLC process calls for (DuFour & Fullan, 2013, p. 15). Knight (2014) referred to learning as being compulsory– professionals must continuously improve; if not, they are acting unprofessional (p. 25). When teachers function as PLCs and work together, everyone benefits (Danielson, 2002, p. 92). Through PLCs, teachers are able to promote a culture of professional inquiry by sharing instructional strategies and establishing a common purpose among team members as instructional practices are cultivated and refined (Danielson, 2002, p. 96). PLCs must be structured in a manner that allows meaningful collaboration among the members (DuFour, DuFour, Eaker, & Many, 2010, p. 120).

The PLC process requires a cultural change (DuFour & Fullan, 2013, p. 2). The social and environmental systems of an organization impact cultural transformations (Balls et al., 2011, p. 118). According to DuFour and Fullan (2013), successful education reform efforts change the culture in systematic ways (p. 4). Changing the learning culture directly impacts student learning (Balls et al., 2011, p. 35). DuFour and Eaker

(1998) described the process of changing the educational system as an "absolutely daunting task" (p. 13). However, DuFour, DuFour, Eaker, and Many (2010) contended the PLC journey is worthwhile and a journey worth taking (p. 7).

According to DuFour and Eaker (1998), the most promising strategy for sustained, substantive school improvement is developing the ability of school personnel to function as PLCs (p. xi). Sustained teacher performance is closely tied to the establishment of a learning culture that sustains itself (Balls et al., 2011, p. 20). In order to transform a school into a PLC, school personnel must have an understanding of what a PLC looks like and how one operates. School reform has been recognized as a very difficult task (DuFour & Eaker, 1998, p. 13). However, Huffman and Hipp (2003) contended that PLCs are more than a school-based reform. The structure of the PLC helps sustain other school improvement initiatives (p. 4). The establishment of a PLC is a collective effort (Pirtle & Tobia, 2014, p. 7).

Role of the Principal

Today, principals have a more demanding role than they did 30 years ago (Stewart, 2013, p. 51). The role of the 21st century principal has changed from "bells, buildings, and buses" to a focus on instructional leadership (Stewart, 2013, p.52). In an effective school, the principal acts and serves as an instructional leader and continually communicates the mission to all stakeholders (Lezotte & McKee, 2002, p. 16). The instructional leadership of the principal is critical in the overall effectiveness of the school and the success of any improvement initiative (Lunenburg, 2010, p. 5). According to DuFour and Mattos (2013), "principals are in a paradoxical position" (p. 34). In order to improve student learning, principals are being asked to implement reforms that have proven to be ineffective in raising student achievement (p. 34). DuFour and Mattos

emphasized that in order to improve student achievement, principals must focus on efforts to collectively monitor and gather evidence of student learning through PLCs (p. 37). PLCs can improve the overall performance of schools, student engagement, and the sense of job satisfaction and efficacy among educators (DuFour & Fullan, 2013, p. 4).

Self-efficacy and collective efficacy are impacted by the behaviors of the leader (Balls et al., 2011, p. 35). The behaviors and expectations showcased by the leader most directly contribute to the development of a learning culture (Balls et al., 2011, p. 95). By adopting a servant leadership orientation, leaders can position themselves as partners with their colleagues (Knight, 2014, p. 102). When leaders take this stance, they view themselves as equals with their peers and expect to learn from them (Knight, 2014, p. 102). Leaders can encourage learning by demonstrating and showcasing learning in their daily actions (Knight, 2014, p. 141). Knight (2014) referred to principals as "first learners" (p. 141). It is critical that principals find ways to share their learning with the educators in their organizations (p. 141). According to Knight, leaders have to be the first learners if they want a learning culture in their schools (p. 141). "When leaders are partners, they ensure that colleagues' autonomy is respected, they encourage dialogue between team members, and they ensure that team participants have choices" (Knight, 2014, p. 102). Balls et al. (2011) contended the key to building collective efficacy is leadership development (p. 42). Schools today need "learning leaders" who focus on creating a collaborative learning environment for everyone (DuFour & Mattos, 2013, p. 40). According to DuFour and Marzano (2009), when principals make the transition from instructional leaders to learning leaders, they begin to focus on learning and utilizing evidence of learning to strengthen and improve professional practice (p. 63). An effective principal demonstrates an understanding of instructional effectiveness and

applies it to the management of the instructional program (Lezotte & McKee, 2002, p. 17). Knight encouraged leaders to *walk the talk* and model their expectations (p. 103). According to Balls et al. (2012), the role of the principal is to "inspire others toward collaboration and interdependence as they work toward a purpose to which they are deeply committed" (p. 37). Collaborative learning environments offer benefits for all learners by providing continuous exposure to new ideas (Chappuis, Chappuis, & Stiggins, 2009, p. 60). DuFour and Marzano (2009) found that principals are far more likely to increase student achievement by promoting teacher learning within collaborative teams than by focusing on formal teacher evaluation (p. 63).

The principal plays a vital role in the transformation process (Gerstner, Semerad, Doyle, & Johnston, 1994, p. 133). Principals need to foster the PLC culture by focusing on five key steps.

1. Continually examine practices, programs, and procedures that are in place within the school to ensure that they align with and support the goal of all students learning at high levels.
2. Establish and organize collaborative teams that are accountable and share the responsibility for student learning.
3. Support teams in the establishment of curriculums, guidelines, and assessments that ensures learning for all students.
4. Utilize evidence of student learning to identify gaps and areas of concern that need addressed.
5. Establish an intervention plan that ensures student will be provided additional support in the targeted areas of need. (DuFour & Mattos, 2013, p. 39)

Principals cannot make the transformation alone; however, effective leadership plays an

essential role in the success of a PLC (DuFour & Eaker, 1998, p. 203). School leaders must continually seek out ways to create and maintain a culture of high expectations, support all students, and establish norms around teacher growth that allow teachers to teach students well (Walker, 2002, p. 3). A climate of high expectations exists within an effective school and the staff believes and demonstrates that all students can showcase mastery of the curriculum (Lezotte & McKee, 2002, p. 18). Setting expectations often begins with administration; but in effective schools, teachers accept the responsibility for continuing to develop and sustain those expectations (Huffman & Hipp, 2003, p. 42). Research indicates that teachers hold themselves accountable in PLC environments (Huffman & Hipp, 2003, p. 42).

Role of the Teacher

The classroom is the focal point of a learning community. Due to this, teachers are in the position to create the greatest positive impact on the lives of children (DuFour & Eaker, 1998, p. 206). Therefore, teachers are essential to any educational reform effort. DuFour and Eaker (1998) emphasized the success of any learning community initiative is determined by the commitment of the professionals within a school, particularly teachers (p. 206). Boyer (1995) emphasized the importance of the teacher role (p. 31). As school leaders, teachers have the ability to inspire and lead the direction of a school (Boyer, 1995, p. 31). The community of a school is established by a shared vision that teachers sustain (Boyer, 1995, p. 31). Boyer described teachers as the "heartbeat" of a successful school (p. 31).

Good schools are created with good teachers, just as PLCs are created with teachers who function as professionals (DuFour & Eaker, 1998, p. 233). Teachers must commit to being lifelong learners and continually working to advance their knowledge

and skills in order to provide students with the best learning opportunities (Danielson, 2002, p. 9). Teacher growth and development depends on their ability to reflect on their learning and adjust their behavior based on that reflection (Lyons & Pinnell, 2001, p. 139). The PLC process empowers teams to have a voice when making important decisions (DuFour & Mattos, 2013, p. 38). LaPrade (n.d.) emphasized that the effectiveness of a PLC depends on the quality of the conversation that takes place (p. 1). Collaboration must be meaningful (DuFour, 2004). In order to build a PLC, teachers must understand the power of collaboration and be willing to work together to analyze and improve their classroom practice (DuFour, 2004). It is through this process that student achievement increases (DuFour, 2004). According to Harvey and Daniels (2009), proficient collaborators think and act (p. 46). In order to improve, teachers must continually Study – Reflect – Plan – Do (Lezotte & McKee, 2002, p. 36). Harvey and Daniels emphasized the importance of reflection and correction (p. 46). Reflective practice has been recognized as being imperative for professional growth (Balls et al., 2011, p. 106). PLC members should do frequent reflections on group conversations to identify behaviors that hurt or helped the discussion, talk openly about problems or concerns, and make plans to try out new strategies and assess their effectiveness (p. 46). The collaborative process is a crucial tool for reflection (Balls et al., 2011, p. 108). Through the natural flow of conversation, one can use peers or others to discuss teaching and learning (Balls et al., 2011, p. 108). Lezotte and McKee (2002) recommended pursing the continuous improvement cycle with the mindset that everything can be improved (p. 36).

Role of the Parent

Danielson (2002) referred to parents as their children's first teachers and essential

partners of educators (p. 35). The United States Department of Education (1995) stated, "Thirty years of research make it clear: parents and families are pivotal to children's learning" (p. 19). According to Danielson (2002), students learn more when parents take interest in their progress at school and are actively involved in their education (p. 30). Schools that function as PLCs understand and recognize the importance of parental partnerships and develop strategies to establish these partnerships (DuFour & Eaker, 1998, p. 253). In an effective school, parents showcase an understanding of the mission and are provided with opportunities to support and assist the school in achieving its mission (Lezotte & McKee, 2002, p. 19).

Role of the School District

The district has a vital role in supporting the PLC process. Researchers have found that support from the central office is mandatory for schools to remain effective (DuFour & Marzano, 2011, p. 28). When there is a district-wide priority of creating and maintaining effective schools, a school is much more likely to maintain its effectiveness status through leadership transitions (Lezotte, 2011, p. 15). According to Louis, Leithwood, Wahlstrom, and Anderson (2010), the districts that improve student achievement understand the "critical importance of patience and sustained, continual efforts aimed at improvement" (p. 213).

Six Elements of the PLC Model

The PLC model consists of six elements: (1) shared mission, vision, and values; (2) collective inquiry; (3) collaborative teams; (4) an orientation towards action and a willingness to experiment; (5) commitment to continuous improvement; and (6) a focus on results (DuFour & Eaker, 1998, p. 45). Each element is described below.

1. **Shared mission, vision, and values.** Building the foundation is the first step

in making the transformation to a PLC. During this process, the mission, vision, values, and goals are established (DuFour & Eaker, 1998). The mission statement clarifies priorities and sharpens focus (DuFour, DuFour, Eaker, & Many, 2010, p. 31). DuFour DuFour, Eaker, and Many (2010) emphasized that the words of a mission statement are pointless unless people begin to act and do differently (p. 23). The vision statement gives directions and addresses the current reality and provides strategies, programs, and procedures to improve (DuFour, DuFour, Eaker, & Many, 2010, p. 31). Values are collective commitments that guide behaviors (DuFour, DuFour, Eaker, & Many, 2010, p. 31).

Shared understandings and common values are essential elements of a learning community (DuFour & Eaker, 1998, p. 25). A commitment and focus on student learning should be the essence of all learning communities (DuFour, DuFour, Eaker, & Many, 2010, p. 11).

2. Collective inquiry. According to DuFour and Eaker (1998), an improvement initiative is sustained through communication, collaboration, and culture (p. 106). By engaging in collective inquiry, members of PLCs learn how to learn together (DuFour, DuFour, Eaker, & Many, 2010, p. 7). It is this process that builds the capacity of educators to establish a powerful learning community (DuFour, DuFour, Eaker, & Many, 2010, p. 7). Through collective inquiry, members of the learning community develop new skills and capabilities, which lead to new experiences and awareness (DuFour & Eaker, 1998, p. 26). According to Evans (2001), job satisfaction and performance can be improved by providing opportunities for teachers to collaborate and engage in reflective practice (p. 232).

In order to sustain the work of a PLC, teachers must be willing to share

information (Hipp & Huffman, 2010, p. 125). Through this process of sharing and collective learning, everyone's knowledge and skills improve (Hipp & Huffman, 2010, p. 125). "Knowledge and skills increase more rapidly when you get feedback and correctives on your performance and learn new strategies from someone who already knows how things work" (Hipp & Huffman, 2010, p. 125). Student learning is enhanced when collective learning occurs among teachers and administrators (Hipp & Huffman, 2010, p. 125). It is through the process of collective learning that the work of a PLC is sustained (Hipp & Huffman, 2010, p. 125).

3. Collaborative teams. Collaboration is an essential component of the PLC model. Collaborative teams within a PLC share a common purpose (DuFour & Eaker, 1998, p. 26). Wenger, McDermott, and Snyder (2002) described PLCs as "groups of people, who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis" (p. 14). DuFour, DuFour, Eaker, and Many (2010) described collaboration as a systematic process in which teachers work together to improve their practices in ways that will improve the school as a whole (p. 12). It is imperative that professionals engaged in collaboration understand and focus on the right work, which should involve improving student achievement (DuFour, DuFour, Eaker, & Many, 2010, p. 119). Effective collaboration engages team members in continuous dialogue on the four critical questions that drive the work of PLCs.

1. What is it we want our students to learn?
2. How will we know if each student is learning each of the skills, concepts, and dispositions we have deemed essential?
3. What happens in our school when a student does not learn?

4. What happens in our school when students already know it? (DuFour, DuFour, Eaker, & Karhanek, 2010, pp. 33-34)

According to DuFour, DuFour, Eaker, and Many (2010), continuous dialogue around these four questions is crucial in the PLC journey (p. 35). Students, teachers, and the school as a whole benefit tremendously from addressing these questions (DuFour, DuFour, Eaker, & Karhanek, 2010, p. 35). Continuous improvement is fueled by the momentum that is established when people work together and have the opportunity to learn from one another (DuFour & Eaker, 1998, p. 27).

4. Action-based. PLCs are action-based (DuFour & Eaker, 1998, p. 27). Members are willing to take action. Aspirations are turned into actions, and visions are turned into reality (DuFour, DuFour, Eaker, & Many, 2010, p. 12). "I hear and I forget. I see and I remember. I do and I understand," a famous quote by Confucius recognizes the effectiveness of learning by doing (Young, 2009, p. 1). Engagement and experience is valued by team members (DuFour, DuFour, Eaker, & Many, 2010, p. 12). DuFour, DuFour, Eaker, and Many (2010) recognized teachers as catalysts for action (p. 12). Members of a PLC recognize failure as a part of the learning process (DuFour & Eaker, 1998, p. 28).

5. Continuous improvement. DuFour, DuFour, Eaker, and Many (2010) emphasized that the process of continuous improvement is an ongoing cycle that involves (1) gathering evidence of current levels of student learning, (2) developing strategies and ideas to build on strengths and address weakness in that learning, (3) implementing those strategies and ideas, (4) analyzing the impact of the changes to discover what was effective and what was not, and (5) applying new knowledge in the next cycle of continuous improvement (p. 13). DuFour and Eaker (1998) stated, "A commitment to

continuous improvement is evident in an environment in which innovation and experimentation are viewed not as tasks to accomplish or projects to complete, but as ways of conducting day-to-day business, forever" (p. 28).

6. Results-oriented. Senge, Kleiner, Roberts, Ross, and Smith (1996) concluded, "The rationale for any strategy for building a learning organization revolves around the premise that such organizations will produce dramatically improved results" (p. 44). PLCs align improvement goals with those of the school and district (DuFour, DuFour, Eaker, & Many, p. 13). Data are recognized as essential components of the continuous improvement process (DuFour, DuFour, Eaker, & Many, 2010, p. 197). Eaker and Keating (2012) contended that "Collaboratively analyzing learning data will do little to improve performance levels. District leaders must guarantee the connection between collaboratively analyzing student learning and the utilization of specific, focused intervention plans to provide students with additional time, support, or enrichment" (p. 127). This is a critical connection that PLCs must make. Leaders are challenged with the task of identifying meaningful actions that are necessary to improving learning for all (DuFour, DuFour, Eaker, & Many, 2010, p. 6). PLCs create structures that aide in sustaining other initiatives intended to foster school improvement (Huffman & Hipp, 2003, p. 4).

Efficacy of Teacher Collaboration

Building shared knowledge is a critical step in finding common ground (DuFour, DuFour, Eaker, & Karhanek, 2010, p. 181). Engagement in collective learning and inquiry allows teachers to find common ground (DuFour, DuFour, Eaker, & Karhanek, 2010, p. 182). According to Berry et al. (2009), teachers are most effective when given the time and tools to collaborate with peers (p. 1).

Researchers have cited two types of supportive conditions needed to build effective PLCs: people capacities (human capital) and structural/physical conditions (Huffman & Hipp, 2003, p. 12). According to Eastwood and Louis (1992), supportive conditions are the most important factor to enhancing school improvement (p. 215). In order to support people capacities, a culture of trust and caring relationships must exist among staff and students (Huffman & Hipp, 2003, p. 13). Hipp and Huffman (2010), emphasized the importance of developing the relationships among the stakeholders in an organization (p. 129). Novartis Professor of Leadership and Management Amy Edmondson from Harvard University concluded that people need to feel psychologically safe in order to learn and be productive (Knight, 2014, p. 24). In psychologically safe environments, people trust and respect each another (Knight, 2014, p. 24). According to Bryk and Schneider (2002), "Trust is forged in daily social exchanges – trust grows over time through exchanges where the expectations held for others are validated in action" (pp. 136-137). In this type of safe environment, individuals feel safe and believe they will not be penalized, resented, or humiliated for making mistakes or asking for help (Knight, 2014, p. 24). All stakeholders work together to embed change into the culture of the school (Olivier, Hipp, & Huffman, 2010). As stakeholders work together for the benefit of student learning, the initiative must be taken in nurturing, coaching, and rewarding (Hipp & Huffman, 2010, p. 129). According to Heaton (2013), "PLCs share many characteristic with peer coaching models of staff development" (p. 1). Opportunities to collaborate with peers, shared values, reflective dialogue, and shared decision making are a few of the shared characteristics Bruce and Ross (2008) described. Research indicates these types of shared characteristics often result in successful team collaboration (Toole & Louis, 2002). Knight (2014) emphasized the importance of

teachers having a voice and opportunity to share their knowledge, insights, and ideas during the coaching process (p. 43). Communication improves when others' perspectives are understood (Knight, 2014, p. 116). Teachers should be viewed as equal partners (Knight, 2014, p. 43). It is through this type of partnership that trust is established (Knight, 2014, p. 41). According to Knight (2014), the most important relationship-building strategy is for leaders to have faith in their teachers (p. 147). Achievements should be recognized and celebrated regularly (Olivier et al., 2010). According to Hipp and Huffman (2010), the following behaviors promote supportive conditions that foster people capacities and relationships:

1. In order to develop trust and promote respect, initiate social interaction opportunities that allow individuals to get to know one another on a more personal level.
2. Be mindful when delegating, focus on results, and reduce conflict among stakeholders.
3. Listen and value one another.
4. Engage individuals in dialogue to resolve continuous problems.
5. Encourage individuals to remain open to other ideas and opinions. (p. 129)

Structural/physical conditions are important to ensure teachers and administrators have readily available the resources they need to conduct their work (Huffman & Hipp, 2003, p. 13). During the process of establishing a PLC, old structures will be replaced by newer ones (Hipp & Huffman, 2010, p. 127). Often, schedules have to be changed to allow more opportunities for teachers and administrators to work collaboratively (Hipp & Huffman, 2010, p. 127). Time for teachers to meet and collaborate is critical for PLCs (Huffman & Hipp, 2003, p. 13). Data should be organized and staff members should be

provided easy access (Olivier et al., 2010). The environment should be one that is safe, orderly, clean, attractive, and inviting (Olivier et al., 2010). Easy access for collaborating with colleagues should be made possible through the physical proximity of grade level and department personnel (Huffman & Hipp, 2003, p. 12). Opportunities should be provided for teachers to influence decision making (Huffman & Hipp, 2003, p. 13). Communication systems should promote a flow of information among all stakeholders (Olivier et al., 2010).

Research indicates a strong correlation between PLCs, teacher efficacy, and student academic growth (Pirtle & Tobia, 2014, p. 2). In conjunction with the Ford Foundation, the Teachers Network conducted a study on collaboration and how it relates to teacher efficacy and effectiveness. The findings evidenced "collaboration among teachers paves the way for the spread of effective teaching practices, improved outcomes for the students they teach, and the retention of the most accomplished teachers in high needs schools" (Berry et al., 2009, p. 2). The results show that teacher effectiveness has more to do with teachers working collaboratively and providing collective leadership for their schools and communities and little to do with individual attributes (Berry et al., 2009, p. 2). Collaborative school environments have been proven effective in improving teacher quality (Burns & Darling-Hammond, 2015, p. 1). Collective teacher efficacy increases when teachers are provided with opportunities to collaborate and learn from their colleagues (Burns & Darling-Hammond, 2015, p. 1).

New studies suggest that collaborative work is beneficial for teachers at any experience level (Berry et al., 2009, p. 2). "Teachers who have consistent opportunities to work with effective colleagues also improve in their teaching effectiveness" (Berry et al., 2009, p. 2). Berry et al. (2009) referred to teaching as a "collaborative enterprise" (p.

2). Teaching requires significant peer support and input for success (Berry et al., 2009, p. 2). Sixty-four percent of the participants in the Teachers Network study said the primary reason for joining their local collaborative networks was because they "wanted a professional community" of other teachers with whom they could exchange ideas and best practices (Berry et al., 2009, p. 2).

According to studies conducted by the Center for Teaching Quality, best practices for collaboration linked with teacher effectiveness include

1. Scheduling time and providing opportunities for collaboration.
2. Establishing horizontal and vertical structures for collaboration.
3. Designing collaborative meetings formally.
4. Establishing an atmosphere of trust and respect. (Berry et al., 2009, p. 6)

The most important factor in raising teacher quality and increasing student achievement is providing "adequate time to work with colleagues and professional development that focuses on systemic, sustained, and collective study of student work where peers critique and help each other teach more effectively" (Berry et al., 2009, p. 8). In order to maximize the benefits gained from teamwork, schools must maximize time provided for teachers to work together (LaPadre, n.d., p. 3). According to Lezotte and McKee (2002) schools can find time for activities they value and cannot find time for those they do not (p. 10). Daily interaction among teachers regarding student achievement is an indicator of a high-performance team (Balls et al., 2011, p. 226). Balls et al. (2011) referred to collaboration as a powerful force that separates ordinary from extraordinary (p. 226).

Teacher Dispositions

Research suggests that teacher dispositions can impact self-esteem, overall performance, and the organization as a whole (Balls et al., 2011, p. 80). Danielson

(2002) referred to dispositions as perseverance, patience, and curiosity (p. 7). Likewise, Balls et al. (2011) contended that dispositions indicate a passion and desire to perform (p. 79). Teacher dispositions impact behaviors which influence the outcome of student achievement (Balls et al., 2011, p. 80). Teacher dispositions have a direct impact on student achievement, academic growth, and overall student success (Balls et al., 2011, p. 19). The Education Department at Mansfield University identified 11 dispositions on which educators should be assessed: reflection, professional judgment, respect for diversity, high expectations, respect for others, compassion, advocacy, curiosity, dedication, honesty, and fairness (Balls et al., pp. 14-16). "Dedication and the right teacher disposition can at times allow students to be reached by educators who would normally not have the ability to impact students of poverty" (Balls et al., 2011, p. 81).

Curriculum

DuFour and Eaker (1998) emphasized the curriculum as being a main component of a school that functions as a PLC (p. 178). "A professional learning community strives to provide its students with a curriculum that has been developed by the faculty through a collaborative process and enables the school to foster a results orientation in its most crucial area – student learning" (DuFour & Eaker, 1998, p. 152). Much attention is given to student learning in schools where strong PLCs exist (Louis et al., 1996). PLCs are committed and focused on student learning (DuFour, DuFour, Eaker, Many, 2010, p. 11). Schools that function as PLCs engage school staff in meaningful learning which "can lead to increased student achievement" (Huffman & Hipp, 2003, p. xvi). Members of a PLC have a clear understanding and vision of what it takes to ensure that all students learn. Each member is committed to making sure this happens by utilizing "results-oriented goals to mark their progress" (DuFour, DuFour, Eaker, Many, 2010, p. 11).

DuFour, DuFour, Eaker, and Many (2010) wrote,

> Members work together to clarify exactly what each student must learn, monitor each student's learning on a timely basis, provide systematic interventions that ensure students receive additional time and support for learning when they struggle, and extend and enrich learning when students have already mastered the intended outcomes. (p. 11)

According to DuFour, DuFour, Eaker, and Many (2010), in a PLC, "learning will be the constant" (p. 40). They stated that it is "imperative that time and support become variables" (p. 40).

Benefits to PLC Implementation

According to DuFour, DuFour, Eaker, and Many (2010), the PLC is the most gratifying and effective way to approach new practices, procedures, and work (p. 16). The model offers a "tangible, realistic, compelling vision of what schools might become" (DuFour, DuFour, Eaker, & Many, 2010, p. 16). The PLC model promotes a collaborative culture which leads to higher levels of student achievement (DuFour, 2004, pp. 6-11). Teacher morale increases in a collaborative culture which impacts student achievement (Podsen, 2002, p. 9). Student learning is impacted by teacher morale (Lumsden, 1998, p. 2). Learning is most enjoyable for teachers and students when teacher morale is high (Lumsden, 1998, p. 2). Research shows that the classroom environment is more conducive to learning when the teacher showcases a high level of teacher morale (Lumsden, 1998, p. 2).

The improvement process must begin with an honest assessment of the current reality (DuFour, DuFour, Eaker, & Many, 2010, p.16). Educators must agree on where they are before determining where they want to go (DuFour, DuFour, Eaker, & Many,

2010, p. 16). According to DuFour, DuFour, Eaker, and Many (2010), schools and districts have to take what they know about the improvement process and turn it into action (p. 17).

PLCs provide advantages to schools and districts (Annenburg Institute for School Reform, 2004, p. 3). According to the Annenburg Institute for School Reform (2004), PLCs can enhance leadership, improve academic achievement, decrease achievement gaps, increase learning, minimize teacher isolation, promote positive cultural change, increase individual and collective teacher efficacy, increase teacher morale, improve job satisfaction, increase teacher retention rates, and strengthen the community (p. 3). The research and fieldwork of Hipp and Huffman (2010) indicated that supportive conditions such as trust, respect, and inclusiveness remain the glue that allows effective communication, learning, and growth to occur (p. 136). Teachers who participate in PLCs showcase lower rates of absenteeism and greater job satisfaction (Burns et al., 2007, p. 92).

PLCs can be a powerful professional development tool when utilized correctly (Claycomb, n.d., p. 1). DuFour, DuFour, Eaker, and Many (2010) contended that the PLC model just makes sense (p. 14).

Challenges to PLC Implementation

The complexity of the change process must be understood. Fullan (1993) emphasized, "Conflict is essential to any successful change effort" (p. 27). Allowing time to work through the problems associated with the change process is essential for a reform to be successful (Klein, Medrich, & Perez-Ferreiro, 1996). Research by DuFour and Fullan (2013) showed that the transformation process can be challenging and difficult. Factors that contribute to the difficulty include the following.

1. Significant changes to traditional schooling practices occur; many of which that have endured for over a century.
2. Relations among people, schools, and systems change.
3. Conflict is guaranteed.
4. It is multifaceted.
5. It is a continuous process of trial and error.
6. The process is never ending – continuous improvement is always a journey and never a destination. (DuFour & Fullan, 2013, pp. 3-4)

DuFour and Fullan (2013) emphasized that plenty can go wrong during the transformation process (p. 16). People tend to be "vulnerable to quick fixes" and because PLCs have been proven to work, many see it as a "program solution" (p.16). The PLC process is made up of sophisticated concepts and many fail to understand what the process looks like in action. "When all teachers in a school engage intentionally and continuously in the learning process, rather than in isolated pockets and in uncoordinated efforts, the capacity of the school to solve problems and maintain focus and commitment is powerfully enhanced" (Huffman & Hipp, 2003, p. 77).

DuFour and Eaker (1998) found that educators are typically very positive and encouraged by the PLC model (p. 109). However, "they are not always optimistic" (DuFour et al., 2002, p. 109). The feedback received from educators indicates that the reason for the lack of optimism normally has to do with their position within the school district. Many times educators question the opposition that will come about by the implementation of the PLC model. Rebecca DuFour believed "professional learning communities are our best hope and our most promising model for sustained school improvement" (DuFour et al., 2002, p. 77). DuFour, DuFour, and Eaker (2002)

contended that their main goal in writing *Getting started: Reculturing schools to become professional learning communities* was to encourage educators to "'do something' – regardless of their position within their organizations" (p. 110). According to Huffman and Hipp (2003), "research leaves us optimistic that, for staff to be motivated, they must believe that schools can be transformed" (p. xvii). In order to begin the transformation process, DuFour, DuFour, and Eaker (2002) suggested building a collaborative culture focused on learning (p. 111). A collaborative culture within a PLC is fostered by the utilization of collaborative teams that work interdependently to achieve common goals (DuFour et al., 2002, p. 111). As Wheelis (1973) stated, "Since we are what we do, if we want to change what we are, we must begin by changing what we do" (p. 13).

Summary

The purpose of this study was to examine the perceived impact of PLCs on collective teacher efficacy in two rural western North Carolina school districts. According to DuFour et al. (2002), our best hope for reculturing schools are PLCs. Each word in the phrase "professional learning community" has a significant meaning (DuFour & Eaker, 1998, pp. xi-xii). The PLC process should be one that is continuous and never ending (DuFour, DuFour, Eaker, & Many, 2010, p. 10). The implementation of PLCs must be structured in a manner that fosters ongoing conversations and dialogue about teaching and learning (Pirtle & Tobia, 2014, p. 7). The establishment of a PLC is a collective effort and involves all stakeholders (Pirtle & Tobia, 2014, p. 7). Specifically, the principal, teacher, parent, and school district all play vital roles in the success of a PLC. It is through the process of collective learning that the work of a PLC is sustained (Hipp & Huffman, 2010, p. 125). Through this process of sharing and collective learning, everyone's knowledge and skills improve (Hipp & Huffman, 2010, p. 125).

Student learning is enhanced when collective learning occurs among teachers and administrators (Hipp & Huffman, 2010, p. 125). The PLC model consists of six key elements, all of which must exist for success and effectiveness (DuFour & Eaker, 1998, p. 45). According to Danielson (2002), when teachers function as PLCs and work together, everyone benefits (p. 92).

Huffman and Hipp (2003) identified two types of supportive conditions needed to building effective PLCs: people capacities (human capital) and structural/physical conditions (p. 12). In order to support people capacities, a culture of trust and caring relationships must exist among staff and students (Huffman & Hipp, 2003, p. 13). Structural/physical conditions are important to ensure teachers and administrators have readily available the resources they need to conduct their work (Huffman & Hipp, 2003, p. 13). Research indicates a strong correlation between PLCs, teacher efficacy, and student academic growth (Pirtle & Tobia, 2014, p. 2). PLCs can enhance leadership, improve academic achievement, decrease achievement gaps, increase learning, minimize teacher isolation, promote positive cultural change, increase individual and collective teacher efficacy, increase teacher morale, improve job satisfaction, increase teacher retention rates, and strengthen the community (Annenburg Institute for School Reform, 2004, p. 3). Teachers who are provided consistent opportunities to work collaboratively with their colleagues improve their teaching effectiveness (Berry et al., 2009, p. 2).

Collective teacher efficacy increases when teachers are provided with opportunities to collaborate and learn from their colleagues (Burns & Darling-Hammond, 2015, p. 1). Research suggests that teacher dispositions can impact self-esteem, overall performance, and the organization as a whole (p. 80). Dispositions indicate a passion and desire to perform (Balls et al., 2011, p. 79). The Education Department at Mansfield

University has identified 11 teacher dispositions: reflection, professional judgment, respect for diversity, high expectations, respect for others, compassion, advocacy, curiosity, dedication, honesty, and fairness (Balls et al., pp. 14-16). Supportive conditions such as trust, respect, and inclusiveness remain the glue that allows effective communication, learning, and growth to occur (Hipp & Huffman, 2010, 136).

PLCs are committed and focused on student learning (DuFour, DuFour, Eaker, Many, 2010, p. 11). The curriculum is a key component of a school that functions and operates as a PLC (DuFour & Eaker, 1998, p. 178). In schools where strong PLCs exist, much attention is given to student learning (Louis et al., 1996).

DuFour, DuFour, Eaker, and Many (2010) contended that the PLC journey is worthwhile (p. 7). The complexity of the transformation process must be understood. "Conflict is essential to any successful change effort" (Fullan, 1993, p. 27).

Chapter 3: Methodology

Introduction

The purpose of this study was to examine the perceived impact of PLCs on collective teacher efficacy in two rural western North Carolina school districts. The theoretical framework for this study began with the assumption that there was a direct linkage between PLCs and collective teacher efficacy. Researchers and professional organizations have endorsed the PLC concept as a viable component of school improvement (DuFour & DuFour, 2006).

Throughout this chapter, the methodology that was used to study the relationship between PLCs and collective teacher efficacy is described. The chapter also includes the research questions, participants, instruments and materials used, data collection procedures, and data analysis.

Research Questions

The research questions that guided the framework for this study were as follows.

1. What are teachers' and administrators' perceptions on the impact PLCs have on collective teacher efficacy?
2. What are teachers' and administrators' perceptions on the effectiveness of collective learning within a PLC?
3. What impact do supportive conditions within PLCs have on collective teacher efficacy?

Participants

For symmetrical purposes, research was conducted and data were collected in two rural school districts in western North Carolina. An elementary, middle, and high school from each district were involved in the study.

School District A is a public school system in western North Carolina serving approximately 2,500 students in Grades Prekindergarten through 13. The seven schools in the system include one early college, one high school, one middle school, and four elementary schools, all located in a small, mostly rural county in the foothills of the Blue Ridge Mountains. Students throughout the district are recognized locally and at the state and national level for their high academic performance on both state and national assessments. The population involved in this study included approximately 151 teachers and seven administrators.

School District B is a public school system in western North Carolina serving approximately 1,950 students in Grades Prekindergarten through 12. The nine schools in the system include two high schools, two middle schools, four elementary schools, and one primary school. The population involved in this study included approximately 92 teachers and five administrators.

For the purpose of this study, an elementary, middle, and high school from each district were studied. The schools involved in District A were referenced as follows: elementary (A1), middle (A2), and high (A3). The schools involved in District B were referenced as follows: elementary (B1), middle (B2), and high (B3). The elementary school in District A serves students in Grades Prekindergarten through 5. The elementary school in District B serves students in Grades Kindergarten through 4. Both middle schools serve students in Grades 6-8. Likewise, both high schools serve students in Grades 9-12.

For validity and comparison purposes, the schools that were selected to participate in this study shared the most similar demographics. Historically in both districts, PLCs have been hosted at the school level and not district-wide. Neither school district has

"formally" implemented PLCs at the district level. However, both districts argue that they have structures, departments, grade levels, and teams functioning as PLCs and are doing well in supporting student learning.

Instruments

One survey instrument was utilized to collect data for this study. The survey was administered by electronic mail to the teachers and administrators at the identified schools. According to Creswell (2009), survey research is "a quantitative or numeric description of trends, attitudes, or opinions of a population by studying a sample of that population" (p. 12).

The survey that was utilized for this study was the PLCA-R instrument (Appendix A). The researcher received permission (Appendix B) to utilize the PLCA-R survey instrument by Dr. Dianne F. Olivier who is currently employed by the University of Louisiana at Lafayette – Educational Foundations and Leadership.

The instrument was designed to assess staff perceptions of classroom and school-level practices as they relate to the identified six dimensions of PLCs (Olivier & Hipp, 2015). Based on their research, Hipp and Huffman (2010) modified the six dimensions of PLCs for the PLCA-R instrument (p. 13). Table 1 shows the identified dimensions on the PLCA-R and the number of questions related to each dimension.

Table 1

Six Identified Dimensions of PLCs on the PLCA-R

Dimension	Questions
Shared and Supportive Leadership	1-11
Shared Values and Vision	12-20
Collective Learning and Application	21-30
Shared Personal Practice	31-37
Supportive Conditions – Relationships	38-42
Supportive Conditions – Structures	43-52

The survey consists of 52 items and utilizes a 4-point Likert scale in which respondents can indicate to which level they agree or disagree: 1-strongly disagree (SD), 2-disagree (D), 3-agree (A), and 4-strongly agree (SA). Respondents have the option of adding additional comments at the end of each dimension.

Displayed in Table 2 are the survey items related to each research question.

Table 2

Survey Items for Research Questions 1-3

Research Questions	Survey Items
1. What are teachers' and administrators' perceptions on the impact PLCs have on collective teacher efficacy?	1-52
2. What are teachers' and administrators' perceptions on the effectiveness of collective learning within a PLC?	21-30
3. What impact do supportive conditions within PLCs have on collective teacher efficacy?	38-52

The original Professional Learning Communities Assessment (PLCA) was designed in 2003 (Olivier & Hipp, 2015). The developers of the PLCA determined the assessment was missing an important aspect of PLCs–the collection, interpretation, and use of data (Hipp & Huffman, 2010, p. 30). Revisions were made in 2010 resulting in the PLCA-R (Olivier & Hipp, 2015). In order to verify relevance of the additions to the assessment, responses were solicited to an Expert Opinion Questionnaire from educators who had knowledge of the original PLCA or had utilized the assessment (Hipp & Huffman, 2010, p. 31). The panel represented a diverse group of experts who showcased knowledge of PLCs (Hipp & Huffman, 2010, p. 31). The experts assessed the importance and relevance of the identified dimensions (Hipp & Huffman, 2010, p. 31). According to Hipp and Huffman (2010), the responses were overwhelmingly positive and indicated the feasibility of utilizing the PLCA-R to assess data-related practices within the PLC dimensions (p. 31). The PLCA-R has been administered throughout the United States at various levels (Olivier & Hipp, 2015). The survey instrument has been utilized to determine the strengths of practice within each domain and identify areas for improvement (Olivier & Hipp, 2015). The widespread usage of the instrument led to an analysis and review on the internal consistency within each dimension (Olivier & Hipp, 2015). The results confirmed internal consistency using Cronbach's alpha (Olivier & Hipp, 2015).

A section was added to the beginning of the survey in order to capture demographic information specific to the respondents such as district, position, years of experience, school location, number of years at current school, highest degree obtained, specific content taught, specific grade level(s) taught, gender, and number of years participated in PLCs. In addition, a custom, open-ended question was added at the end of

the survey to capture data that were not addressed in the survey.

Interviews were conducted with teachers and administrators from each school district. In addition, a district office member from the department of curriculum and instruction was interviewed from each district. The interview questions can be found in Appendix C. Interviewees were randomly selected. Throughout the interviews, information was gained about collective teacher efficacy as it relates to PLCs, teacher perceptions of PLCs, administrator perceptions of PLCs, and characteristics of the PLC model that teachers find to be the most impactful; and any differences among the demographic groups were identified. The interviews served as a follow-up to survey responses and a way to seek a greater level of understanding.

The researcher conducted focus-group sessions following the interview process to aid in the analysis of the data collected and to assist with any points of clarification that were needed. This process of triangulation aided in validating the data collected.

Procedures

The first step in preparation for this study involved meeting with the superintendent or his/her designee from each school district. Permission to include each district in this study was granted. The formal request to include School District A can be found in Appendix D. The formal response granting permission from School District A can be found in Appendix E. The formal request to include School District B can be found in Appendix F. The formal response granting permission from School District B can be found in Appendix G. Measures were taken to protect the confidentiality of the individuals who participated in the study. Names of participating school districts and schools were changed and coded to protect anonymity. Participation in the study was voluntary, and all participants were provided with a consent form and could withdraw

from the study at any time. The consent form can be found in Appendix H. All data were stored in a secure location to which only the researcher had access.

The study was conducted during the 2016 spring semester. A mixed-methods study approach was used to address the research questions. Teachers and administrators at the identified schools were asked to complete the PLCA-R survey instrument regarding staff perceptions of classroom and school-level practices as they relate to the identified six dimensions of PLCs. The elementary school in School District A serves students in Grades Prekindergarten through 5. The elementary school in School District B serves students in Grades Kindergarten through 4. For consistency and validity purposes, only teachers in Grades Kindergarten through 4 were asked to participate in the study at the elementary schools.

In an attempt to triangulate the data to ensure validity and reliability, interviews and focus-group sessions were conducted. The researcher was responsible for monitoring and analyzing survey results and comments. Direct communication was made with the administrative team members at each school regarding the interviews and focus groups.

Data Analysis Techniques

At the conclusion of data collection, the data were analyzed using descriptive techniques. The research questions served as the framework for this study. The data were analyzed using descriptive techniques in order to determine the type of relationship that exists between collective teacher efficacy and PLCs. The researcher utilized the chi-square goodness of fit test in order to determine whether or not the findings from the study matched and aligned with the theoretical values.

Finally, the researcher utilized a frequency diagram in order to identify the number of times a response was recorded throughout the interview and focus-group

sessions.

Summary

The purpose of this study was to examine the perceived impact of PLCs on collective teacher efficacy in two rural western North Carolina school districts. For symmetrical purposes, research was conducted and data were collected in two rural school districts in western North Carolina. An elementary, middle, and high school from each district were involved in the study. For validity and comparison purposes, the schools that were asked to participate shared similar demographics and PLC models. Permission to include each district in this study was granted.

In order to examine the relationship between PLCs and collective teacher efficacy, teachers and administrators at the identified schools were asked to complete a survey regarding staff perceptions of classroom and school-level practices as they relate to the identified six dimensions of PLCs. The survey that was utilized for this study is the PLCA-R instrument. The survey utilizes a 4-point Likert scale and consists of 52 items. The PLCA-R has been administered throughout the United States (Olivier & Hipp, 2015). In order to capture demographic information, a section was added to the beginning of the survey. In addition, a custom, open-ended question was added at the end of the survey to capture data that were not addressed in the survey.

Interviews were conducted with randomly selected teachers and administrators from each school district. A district office member from the department of curriculum and instruction was interviewed from each district as well. The interviews served as a follow-up to survey responses. Following the interviews, the researcher conducted focus-group sessions to aid in the analysis of the data collected and to assist with any points of clarification that were needed. This process of triangulation aided in validating the data

collected.

Data collected were analyzed using descriptive techniques. The research questions served as the framework for this study. The chi-square goodness of fit test was utilized in this study. In an attempt to ensure validity and reliability, interviews and focus groups were utilized. A frequency diagram was used to identify the number of times a response was recorded throughout the interview and focus-group sessions. Measures were taken to protect the confidentiality of the individuals who participate in the study.

Chapter 4: Results

Introduction

The purpose of this study was to examine the perceived impact of PLCs on collective teacher efficacy in two rural western North Carolina school districts. The theoretical framework for this study began with the assumption that there was a direct linkage between PLCs and collective teacher efficacy. The following questions guided this study.

1. What are teachers' and administrators' perceptions on the impact PLCs have on collective teacher efficacy?
2. What are teachers' and administrators' perceptions on the effectiveness of collective learning within a PLC?
3. What impact do supportive conditions within PLCs have on collective teacher efficacy?

The PLCA-R survey instrument was used to collect the data needed to answer the research questions that served as a framework for this study. The results of this study are presented in three sections. The first section covers the demographic data that were gathered on the participants who responded to the survey. The second section includes statistical analysis and results that address each of the research questions. Finally, the third section captures the data and results the researcher gathered throughout the study.

Data Collection

For symmetrical purposes, research was conducted and data were collected in two rural school districts in western North Carolina. An elementary, middle, and high school from each district were involved in the study.

Approximately 243 teachers and 12 administrators from both school districts were

given the opportunity to complete the survey. The PLCA-R survey was sent to approximately 151 teachers and seven administrators in School District A. In School District A, 64 or 41% of the participants responded to the survey. The PLCA-R survey was sent to approximately 92 teachers and five administrators in School District B. In School District B, 31 or 32% of the participants responded to the survey.

From the total population, seven administrators, 22 elementary school teachers, 34, middle school teachers, and 32 high school teachers completed surveys for this study. Therefore, 95 or 37% of the surveyed population participated in this study. From the total number of participants, 76 were female and 19 were male.

A section was added to the beginning of the survey in order to capture demographic information specific to the respondents. The questions identified (1) district, (2) position, (3) years of experience, (4) school location, (5) number of years at current school, (6) highest degree obtained, (7) specific content taught, (8) specific grade level(s) taught, (9) gender, and (10) number of years participated in PLCs.

Demographics of Sample

Table 3 shows a demographic view of the participants who responded to the survey as it relates to their position and number of years of experience. The data in the table are reported by total number (N) of participants in School District A. The data in Table 3 show that the experience level ranges from 5-21+ years of experience for 60 (93%) participants, with only four (7%) participants reporting 1-4 years of experience.

Table 3

School District A – Number of Years of Experience

	1-2	3-4	5-10	11-20	21+	N
School Level Administrator	0 (0 %)	0 (0%)	0 (0%)	2 (50%)	2 (50%)	4
Teacher	1 (2%)	3 (5%)	15 (27%)	24 (43%)	13 (23%)	56
Special Area Support Staff	0 (0%)	0 (0%)	1 (25%)	3 (75%)	0 (0%)	4
Administrative Support Staff	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0
Total Percent	1 (2%)	3 (5%)	16 (25%)	29 (45%)	15 (23%)	64

Table 4 shows a demographic view of the participants who responded to the survey as it relates to their position and highest degree obtained. The data in the table are reported by total number of participants in School District A. The data in Table 4 reveal that 60 (93.5%) participants hold a Bachelor's or Master's Degree, with only 4 (6.5%) holding a Master's +30 or Doctoral Degree.

Table 4

School District A – Highest Degree Obtained

	Bachelor's Degree	Master's Degree	Master's +30 Degree	Doctoral Degree	N
School Level Administrator	0 (0%)	2 (50%)	2 (50%)	0 (0%)	4
Teacher	26 (46%)	28 (50%)	1 (2%)	1 (2%)	56
Special Area Support Staff	1 (25%)	3 (75%)	0 (0%)	0 (0%)	4
Administrative Support Staff	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0
Total Percent	27 (42%)	33 (51.5%)	3 (5%)	1 (1.5%)	64

Table 5 reports the survey results for the number of years participated in PLCs by the participants. The data in the table are reported by school level within the district and total number of respondents. The data in Table 5 show that all participants at A1 have participated in PLCs. At schools A2 and A3, five (8%) participants reported never participating in PLCs.

Table 5

School District A – Number of Years Participated in PLCs

	0	1-3	4-6	7-9	10+	N
A1	0 (0%)	7 (41%)	9 (53%)	0 (0%)	1 (6%)	17
A2	1 (4%)	2 (8%)	6 (25%)	4 (17%)	11 (46%)	24
A3	4 (17%)	3 (13%)	6 (26%)	3 (13%)	7 (30%)	23
Total Percent	5 (8%)	12 (19%)	21 (32%)	7 (11%)	19 (30%)	64

Table 6 shows a demographic view of the participants who responded to the survey as it relates to their position and number of years of experience. The data in the table are reported by total number of participants in School District B. The data in Table 6 show that the experience level ranges from 5-21+ years of experience for 29 (93%) participants, with only two (6%) participants reporting 1-2 years of experience.

Table 6

School District B –Number of Years of Experience

	1-2	3-4	5-10	11-20	21+	N
School Level Administrator	0 (0 %)	0 (0 %)	0 (0 %)	0 (0 %)	3 (100%)	3
Teacher	2 (8%)	0 (0%)	5 (21%)	13 (54%)	4 (17%)	24
Special Area Support Staff	0 (0%)	0 (0%)	1 (33.3%)	1 (33.3%)	1 (33.3%)	3
Administrative Support Staff	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (100%)	1
Total Percent	2 (6%)	0 (0%)	6 (19%)	14 (45%)	9 (29%)	31

Table 7 shows a demographic view of the participants who responded to the survey as it relates to their position and highest degree obtained. The data in the table are reported by total number of participants in School District B. The data in Table 7 reveal that 20 (94%) participants hold a Bachelor's or Master's Degree, with only 2 (6%) holding a Master's +30 or Doctoral Degree.

Table 7

School District B – Highest Degree Obtained

	Bachelor's Degree	Master's Degree	Master's +30 Degree	Doctoral Degree	N
School Level Administrator	0 (0 %)	2 (67%)	1 (33%)	0 (0 %)	3
Teacher	13 (54%)	10 (42%)	0 (0 %)	1 (4%)	25
Special Area Support Staff	0 (0%)	3 (100%)	0 (0 %)	0 (0 %)	3
Administrative Support Staff	0 (0%)	1 (100%)	0 (0%)	0 (0%)	1
Total Percent	13 (42%)	16 (52%)	1 (3%)	1 (3%)	31

Table 8 reports the survey results for the number of years participated in PLCs by the participants. The data in the table are reported by school level within the district and total number of respondents. The data in Table 8 show that all participants at B1, B2, and B3 have participated in PLCs.

Table 8

School District B – Number of Years Participated in PLCs

	0	1-3	4-6	7-9	10+	N
B1	0 (0%)	2 (28%)	4 (57%)	0 (0%)	1 (14%)	7
B2	0 (0%)	3 (21%)	5 (36%)	1 (7%)	5 (36%)	14
B3	0 (0%)	3 (30%)	3 (30%)	1 (10%)	3 (30%)	10
Total Percent	0 (%)	8 (26%)	12 (39%)	2 (6%)	9 (29%)	31

Demographics of Sample Analysis

The demographic data that were captured on the survey indicate many similarities between the two districts. The number of years of experience ranges from 5-21+ years for 93% of participants in both districts, leaving approximately 7% of the participants reporting 1-4 years of experience. Approximately 94% of the participants in both districts reported a Bachelor's or Master's as the highest degree obtained, with approximately 6% holding a Master's +30 or Doctoral Degree. In School District A, at schools A2 and A3, five (8%) participants reported zero as the number of years participated in PLCs. Of the five participants, four were from A3 and one was from A2. In School District B, 100% of participants reported participating in PLCs for a number of years.

School District Comparison Report of the Six PLC Dimensions

The data gathered from the PLCA-R survey were used to establish the percent agree/strongly agree for the identified six dimensions. Tables 9 and 10 display school district comparison reports of the six PLC dimensions as identified on the PLCA-R.

Table 9 shows the mean and standard deviation (StDev) scores for each dimension. Table 10 shows the positive response (PR) percentages for each dimension.

The six dimensions were coded as follows: Shared and Supportive Leadership (SSL), Shared Values and Visions (SVV), Collective Learning and Application (CLA), Shared Personal Practice (SPP), Supportive Conditions-Relationships (SC-R), and Supportive Conditions-Structures (SC-S).

Table 9

School District Comparison Report of the Six PLC Dimensions: Mean and StDev

School District	Participants		SSL	SVV	CLA	SPP	SC-R	SC-S
A	64	Mean	3.25	3.25	3.10	2.91	3.26	3.16
		StDev	0.67	0.60	0.61	0.71	0.66	0.65
B	31	Mean	3.28	3.23	3.18	3.00	3.26	3.09
		StDev	0.63	0.59	0.66	0.68	0.66	0.69

Table 10

School District Comparison Report of the Six PLC Dimensions: Positive Responses

School District	Participants		SSL	SVV	CLA	SPP	SC-R	SC-S
A	64	PR	89.5	92.9	88.3	75.0	88.8	88.1
B	31	PR	90.6	91.4	86.5	76.5	87.8	83.5

Note. Positive Responses=agree and strongly agree percentages.

The data in Table 9 show similar mean scores for each dimension in both districts. With the exception of the SPP dimension in School District A, the mean scores fell between agree and strongly agree for each dimension.

The data in Table 10 show similar positive responses for each dimension in both districts. The SPP dimension had the lowest positive responses in both districts.

Research Question Alignment with PLCA-R Dimensions

The researcher aligned the findings from the PLCA-R with the research questions that guided the framework for the study. In addition, the researcher triangulated the data using the demographic findings from the survey and information gained from the interviews and focus groups.

In Chapter 3, the researcher aligned the research questions with the survey items (Table 2). Survey items 1-52 align with Research Question 1. Survey items 21-30 align with Research Question 2. Survey items 38-52 align with Research Question 3.

Research Question 1: What are teachers' and administrators' perceptions on the impact PLCs have on collective teacher efficacy? The following dimensions align with Research Question 1: Shared and Supportive Leadership, Shared Values and Vision, Collective Learning and Application, Shared Personal Practice, Supportive Conditions – Relationships, and Supportive Conditions – Structures.

Research Question 2: What are teachers' and administrators' perceptions on the effectiveness of collective learning within a PLC? The following dimension aligns with Research Question 2: Collective Learning and Application.

Research Question 3: What impact do supportive conditions within PLCs have on collective teacher efficacy? The following dimensions align with Research Question 3: Supportive Conditions – Relationships and Supportive Conditions –

Structures.

Table 11 shows the alignment between the research questions and PLCA-R dimensions.

Table 11

Research Question Alignment with PLCA-R Dimensions

SSL Dimension	SVV Dimension	CLA Dimension	SPP Dimension	SC-R Dimension	SC-S Dimension
RQ 1	RQ 1	RQ 1	RQ 1	RQ 1	RQ 1
		RQ 2		RQ 3	RQ 3

Table 12 displays a school level view of the mean scores by dimension. A mean score between 3.0 and 4.0 fell between agree and strongly agree on the Likert scale. A mean score between 2.0 and 3.0 fell between disagree and agree on the Likert scale. The lowest mean score recorded for this study was a 2.67.

Table 12

School Level Comparison Report of the Six PLC Dimensions: Mean Scores

	SSL	SVV	CLA	SPP	SC-R	SC-S
School A1	3.56	3.49	3.44	3.24	3.48	3.28
School A2	3.07	3.22	2.97	2.70	3.03	3.12
School A3	3.20	3.10	2.99	2.88	3.34	3.13
School B1	3.25	3.22	3.27	3.04	3.31	3.13
School B2	3.55	3.48	3.43	3.20	3.49	3.19
School B3	2.93	2.89	2.78	2.67	2.90	2.94

Table 13 displays a global view of the positive response percentages by

dimension for all schools involved in the study.

Table 13

Percentage Summary of Positive Responses by Dimension for All Schools

	SSL	SVV	CLA	SPP	SC-R	SC-S
School A1	98.9	99.4	97.6	90.7	96.5	94.1
School A2	80.7	90.3	82.1	63.7	79.2	85.0
School A3	91.6	90.8	87.8	75.1	93.0	87.0
School B1	89.6	88.9	92.9	81.6	94.3	87.2
School B2	98.7	98.4	91.4	83.7	94.3	83.6
School B3	80.0	83.3	75.0	62.9	74.0	81.0

Note. Positive Responses=agree and strongly agree percentages.

This table showcases many similarities between the participating schools. The data analysis indicates schools A2 and B3 have the lowest percentages of positive responses. Overall, the SPP dimension had the lowest percentages of positive responses.

Table 14 displays the mean scores and positive response percentages by dimension for the two elementary schools involved in the study.

Table 14

Percentage Summary of Positive Responses by Dimension for Elementary Schools

School		SSL	SVV	CLA	SPP	SC-R	SC-S
A1	Mean	3.56	3.49	3.44	3.24	3.48	3.28
	PR	98.9	99.4	97.6	90.7	96.5	94.1
B1	Mean	3.25	3.22	3.27	3.04	3.31	3.13
	PR	89.6	88.9	92.9	81.6	94.3	87.2

Table 15 displays the mean scores and positive response percentages by dimension for the two middle schools involved in the study.

Table 15

Percentage Summary of Positive Responses by Dimension for Middle Schools

School		SSL	SVV	CLA	SPP	SC-R	SC-S
A2	Mean	3.07	3.22	2.97	2.70	3.03	3.12
	PR	80.7	90.3	82.1	63.7	79.2	85.0
B2	Mean	3.55	3.48	3.43	3.20	3.49	3.19
	PR	98.7	98.4	91.4	83.7	94.3	83.6

Table 16 displays the mean scores and positive response percentages by dimension for the two high schools involved in the study.

Table 16

Percentage Summary of Positive Responses by Dimension for High Schools

School		SSL	SVV	CLA	SPP	SC-R	SC-S
A3	Mean	3.20	3.10	2.99	2.88	3.34	3.13
	PR	91.6	90.8	87.8	75.1	93.0	87.0
B3	Mean	2.93	2.89	2.78	2.67	2.90	2.94
	PR	80.0	83.3	75.0	62.9	74.0	81.0

PLCA-R Data Analysis by Frequencies

The researcher analyzed the data by district and school level. The following tables show the frequency counts and percentages of respondent's perceptions of each dimension. For consistency purposes, the items were coded as follows: strongly disagree (SD), disagree (D), agree (A), strongly agree (SA), number (N), and percent (%). The PLCA-R utilizes a Likert scale (1=strongly disagree, 2=disagree, 3=agree, and 4=strongly agree). For the purpose of this study, the researcher identified any dimension with a mean score of 3.00 or below on an area for improvement. In order to examine the overall perceptions on the survey, the researcher analyzed the positive percentages (agree and strongly agree) and negative percentages (strongly disagree and agree).

Shared and Supportive Leadership

In Tables 17, 18, 19, 20, 21, 22, 23, and 24, the researcher analyzed the frequency of percentages for the Shared and Supportive Leadership dimension. Both district- and school-level views are showcased.

Table 17

Respondents' Perceptions of Shared and Supportive Leadership: School District A

Question #	SD		D		A		SA		Total	
	N	%	N	%	N	%	N	%	N	% Agreement
1	1	1.6	6	9.4	37	57.8	20	31.3	64	89.1
2	1	1.6	3	4.7	34	53.1	26	40.6	64	93.7
3	1	1.6	3	4.7	36	56.3	24	37.5	64	93.8
4	1	1.6	3	4.7	29	45.3	31	48.4	64	93.7
5	1	1.6	7	10.9	36	56.3	20	31.3	64	87.6
6	0	0	4	6.3	34	53.1	26	40.6	64	93.7
7	1	1.6	6	9.4	37	57.8	20	31.3	64	89.1
8	0	0	9	14.1	30	46.9	25	39.1	64	86.0
9	0	0	9	14.1	28	43.8	27	42.2	64	86.0
10	3	4.7	8	12.5	37	57.8	16	25.0	64	82.8
11	1	1.6	6	9.4	34	53.1	23	35.9	64	89.0
Total	10		64		372		258		704	89.5

Note. % Agreement=agree and strongly agree.

In School District A, of 64 participants, 89.5% agreed with the items in the Shared and Supportive Leadership dimension. In School District A, the mean score for the SSL dimension was 3.25 with a standard deviation of 0.67. The mean score fell between agree and strongly agree on the Likert scale.

Table 18

Respondents' Perceptions of Shared and Supportive Leadership: School A1

Question #	SD		D		A		SA		Total	
	N	%	N	%	N	%	N	%	N	% Agreement
1	0	0	0	0	8	47.1	9	52.9	17	100.0
2	0	0	0	0	8	47.1	9	52.9	17	100.0
3	0	0	0	0	8	47.1	9	52.9	17	100.0
4	0	0	0	0	4	23.5	13	76.5	17	100.0
5	0	0	0	0	7	41.2	10	58.8	17	100.0
6	0	0	0	0	7	41.2	10	58.8	17	100.0
7	0	0	0	0	8	47.1	9	52.9	17	100.0
8	0	0	0	0	6	35.3	11	64.7	17	100.0
9	0	0	0	0	6	35.3	11	64.7	17	100.0
10	0	0	1	5.9	10	58.8	6	35.3	17	94.1
11	0	0	1	5.9	7	41.2	9	52.9	17	94.1
Total	0		2		79		106		187	98.9

Note. % Agreement=agree and strongly agree.

In school A1, of 17 participants, 98.9% agreed with the items in the Shared and Supportive Leadership dimension. In school A1, the mean score for the SSL dimension was 3.56 with a standard deviation of 0.52. The mean score fell between agree and strongly agree on the Likert scale.

Table 19

Respondents' Perceptions of Shared and Supportive Leadership: School A2

Question #	SD		D		A		SA		Total	
	N	%	N	%	N	%	N	%	N	% Agreement
1	1	4.2	3	12.5	15	62.5	5	20.8	24	83.3
2	1	4.2	2	8.3	14	58.3	7	29.2	24	87.5
3	1	4.2	3	12.5	11	45.8	9	37.5	24	83.3
4	1	4.2	2	8.3	13	54.2	8	33.3	24	87.5
5	1	4.2	5	20.8	14	58.3	4	16.7	24	75.0
6	0	0	3	12.5	13	54.2	8	33.3	24	87.5
7	1	4.2	4	16.7	13	54.2	6	25.0	24	79.2
8	0	0	7	29.2	11	45.8	6	25.0	24	70.8
9	0	0	7	29.2	7	29.2	10	41.7	24	70.9
10	2	8.3	4	16.7	12	50.0	6	25.0	24	75.0
11	0	0	3	12.5	12	50.0	9	37.5	24	87.5
Total	8		43		135		78		264	80.7

Note. % Agreement=agree and strongly agree.

In school A2, of 24 participants, 80.7% agreed with the items in the Shared and Supportive Leadership dimension. In school A2, the mean score for the SSL dimension was 3.07 with a standard deviation of 0.76. The mean score fell between agree and strongly agree on the Likert scale.

Table 20

Respondents' Perceptions of Shared and Supportive Leadership: School A3

Question #	SD		D		A		SA		Total	
	N	%	N	%	N	%	N	%	N	% Agreement
1	0	0	3	13.0	14	60.9	6	26.1	23	87.0
2	0	0	1	4.3	12	52.2	10	43.5	23	95.7
3	0	0	0	0	17	73.9	6	26.1	23	100.0
4	0	0	1	4.3	12	52.2	10	43.5	23	95.7
5	0	0	2	8.7	15	65.2	6	26.1	23	91.3
6	0	0	1	4.3	14	60.9	8	34.8	23	95.0
7	0	0	2	8.7	16	69.6	5	21.7	23	91.3
8	0	0	2	8.7	13	56.5	8	34.8	23	91.3
9	0	0	2	8.7	15	65.2	6	26.1	23	91.3
10	1	4.3	3	13.0	15	65.2	4	17.4	23	82.6
11	1	4.3	2	8.7	15	65.2	5	21.7	23	86.9
Total	2		19		158		74		253	91.6

Note. % Agreement=agree and strongly agree.

In school A3, of 23 participants, 91.6% agreed with the items in the Shared and Supportive Leadership dimension. In school A3, the mean score for the SSL dimension was 3.20 with a standard deviation of 0.60. The mean score fell between agree and strongly agree on the Likert scale.

Table 21

Respondents' Perceptions of Shared and Supportive Leadership: School District B

Question #	SD		D		A		SA		Total	
	N	%	N	%	N	%	N	%	N	% Agreement
1	1	3.2	1	3.2	17	54.8	12	38.7	31	93.5
2	0	0	0	0	15	48.4	16	51.6	31	100.0
3	0	0	1	3.2	24	77.4	6	19.4	31	96.8
4	0	0	4	12.9	11	35.5	16	51.6	31	87.1
5	0	0	4	12.9	18	58.1	9	29.0	31	87.1
6	0	0	2	6.5	18	58.1	11	35.5	31	93.6
7	0	0	1	3.2	13	41.9	17	54.8	31	96.7
8	0	0	1	3.2	17	54.8	13	41.9	31	96.7
9	0	0	3	9.7	17	54.8	11	35.5	31	90.3
10	0	0	10	32.3	14	45.2	7	22.6	31	67.8
11	0	0	4	12.9	16	51.6	11	35.5	31	87.1
Total	1		31		180		129		341	90.6

Note. % Agreement=agree and strongly agree.

In School District B, of 31 participants, 90.6% agreed with the items in the Shared and Supportive Leadership dimension. In School District B, the mean score for the SSL dimension was 3.28 with a standard deviation of 0.63. The mean score fell between agree and strongly agree on the Likert scale.

Table 22

Respondents' Perceptions of Shared and Supportive Leadership: School B1

Question #	SD		D		A		SA		Total	
	N	%	N	%	N	%	N	%	N	% Agreement
1	0	0	0	0	4	57.1	3	42.9	7	100.0
2	0	0	0	0	4	57.1	3	42.9	7	100.0
3	0	0	0	0	6	85.7	1	14.3	7	100.0
4	0	0	2	28.6	2	28.6	3	42.9	7	71.5
5	0	0	1	14.3	4	57.1	2	28.6	7	85.7
6	0	0	1	14.3	4	57.1	2	28.6	7	85.7
7	0	0	0	0	4	57.1	3	42.9	7	100.0
8	0	0	0	0	4	57.1	3	42.9	7	100.0
9	0	0	1	14.3	3	42.9	3	42.9	7	85.8
10	0	0	1	14.3	5	71.4	1	14.3	7	85.7
11	0	0	2	28.6	2	28.6	3	42.9	7	71.5
Total	0		8		42		27		77	89.6

Note. % Agreement=agree and strongly agree.

In school B1, of 7 participants, 89.6% agreed with the items in the Shared and Supportive Leadership dimension. In school B1, the mean score for the SSL dimension was 3.25 with a standard deviation of 0.63. The mean score fell between agree and strongly agree on the Likert scale.

Table 23

Respondents' Perceptions of Shared and Supportive Leadership: School B2

Question #	SD		D		A		SA		Total	
	N	%	N	%	N	%	N	%	N	% Agreement
1	0	0	0	0	5	35.7	9	64.3	14	100.0
2	0	0	0	0	2	14.3	12	85.7	14	100.0
3	0	0	0	0	9	64.3	5	35.7	14	100.0
4	0	0	0	0	4	28.6	10	71.4	14	100.0
5	0	0	0	0	8	57.1	6	42.9	14	100.0
6	0	0	0	0	6	42.9	8	57.1	14	100.0
7	0	0	0	0	2	14.3	12	85.7	14	100.0
8	0	0	0	0	6	42.9	8	57.1	14	100.0
9	0	0	0	0	9	64.3	5	35.7	14	100.0
10	0	0	2	14.3	7	50.0	5	35.7	14	85.7
11	0	0	0	0	7	50.0	7	50.0	14	100
Total	0		2		65		87		154	98.7

Note. % Agreement=agree and strongly agree.

In school B2, of 14 participants, 98.7% agreed with the items in the Shared and Supportive Leadership dimension. In school B2, the mean score for the SSL dimension was 3.55 with a standard deviation of 0.52. The mean score fell between agree and strongly agree on the Likert scale.

Table 24

Respondents' Perceptions of Shared and Supportive Leadership: School B3

Question #	SD		D		A		SA		Total	
	N	%	N	%	N	%	N	%	N	% Agreement
1	1	10.0	1	10.0	8	80.0	0	0	10	80.0
2	0	0	0	0	9	90.0	1	10.0	10	100.0
3	0	0	1	10.0	9	90.0	0	0	10	90.0
4	0	0	2	20.0	5	50.0	3	30.0	10	80.0
5	0	0	3	30.0	6	60.0	1	10.0	10	70.0
6	0	0	1	10.0	8	80.0	1	10.0	10	90.0
7	0	0	1	10.0	7	70.0	2	20.0	10	90.0
8	0	0	1	10.0	7	70.0	2	20.0	10	90.0
9	0	0	2	20.0	5	50.0	3	30.0	10	80.0
10	0	0	7	70.0	2	20.0	1	10.0	10	30.0
11	0	0	2	20.0	7	70.0	1	10.0	10	80.0
Total	1		21		73		15		110	80.0

Note. % Agreement=agree and strongly agree.

In school B3, of 10 participants, 80.0% agreed with the items in the Shared and Supportive Leadership dimension. In school B3, the mean score for the SSL dimension was 2.93 with a standard deviation of 0.60. The mean score fell between disagree and agree on the Likert scale.

Findings from the Shared and Supportive Leadership Dimension

The data showcase many similarities between the two school districts. The mean score was 3.25 in School District A and 3.28 in School District B. Both scores fell between agree and strongly agree on the Likert scale. At the school level, with only one exception, all mean scores fell between agree and strongly agree. School B3 had a mean score of 2.93 for this dimension. Question 10 (stakeholders assume shared responsibility and accountability for student learning without evidence of imposed power and authority) had the lowest mean score for this dimension from school B3. Through interviews and the focus-group session, the researcher determined that the consensus among the teachers was that at the high school level everyone is responsible and accountable for their own. One teacher said, "Unless you are on the same team or within the same department, you really have no idea what other people are doing in the building." Another teacher said, "Our teachers are accountable for the students they teach." In addition, the researcher found some were unsure of what the question was asking. One teacher said, "I am not sure what #10 on the survey means." An interview with a district office member from the department of curriculum and instruction provided the researcher with a deeper understanding of this response. According to the district office member, "The lack of background knowledge on the vocabulary that was used throughout the survey is related to a lack of training on PLCs at the district and school level."

The total percentage in agreement from School District A was 89.5 and 90.6 in School District B. Schools A2 and B3 had the lowest positive response percentages within this dimension. The positive response percentage from A2 was 80.7. The positive response percentage from B3 was 80.0. The focus group at A2 contended that the administrative team members were not advocates for change. One teacher said,

> I believe administration here wants to do what is best for children but is often met with push back in the face of initiating changes. There is also an underlying lack of confidence in the face of change that is completely unwarranted based on the school's performance. The "if it ain't broke, don't fix it" mentality is a theme here.

The "if it ain't broke, don't fix it" quote was a common response from teachers during the interviews and focus group. According to the district office member from the department of curriculum and instruction, this mentality is related to the continuous high results and achievements of the district. In addition, the demographic group with 11-20 years of teaching experience rated this dimension significantly lower than all other groups. The focus group felt the primary cause of this was related to the age of the teachers in this group with 11-20 years of teaching experience. One teacher said, "That group of teachers here always gets very grumpy about meetings and never enjoy meeting in groups."

At school B3, the consensus was that teachers were individualized and shared responsibility and accountability did not exist.

Shared Values and Vision

In Tables 25, 26, 27, 28, 29, 30, 31, and 32, the researcher analyzed the frequency of percentages for the Shared Values and Vision dimension. Both district- and school-level views are showcased.

Table 25

Respondents' Perceptions of Shared Values and Vision: School District A

Question #	SD		D		A		SA		Total	
	N	%	N	%	N	%	N	%	N	% Agreement
12	0	0	5	7.8	49	76.6	10	15.6	64	92.2
13	0	0	3	4.7	48	75.0	13	20.3	64	95.3
14	0	0	7	10.9	33	51.6	24	37.5	64	89.1
15	0	0	2	3.1	31	48.4	31	48.4	64	96.8
16	0	0	6	9.4	40	62.5	18	28.1	64	90.6
17	1	1.6	1	1.6	33	51.6	29	45.3	64	96.9
18	0	0	2	3.1	38	59.4	24	37.5	64	96.9
19	1	1.6	9	14.1	38	59.4	16	25.0	64	84.4
20	2	3.1	2	3.1	37	57.8	23	35.9	64	93.7
Total	4		37		347		188		576	92.9

Note. % Agreement=agree and strongly agree.

In School District A, of 64 participants, 92.9% agreed with the items in the Shared Values and Vision dimension. In School District A, the mean score for the SVV dimension was 3.25 with a standard deviation of 0.60. The mean score fell between agree and strongly agree on the Likert scale.

Table 26

Respondents' Perceptions of Shared Values and Vision: School A1

Question #	SD		D		A		SA		Total	
	N	%	N	%	N	%	N	%	N	% Agreement
12	0	0	0	0	12	70.6	5	29.4	17	100.0
13	0	0	0	0	9	52.9	8	47.1	17	100.0
14	0	0	0	0	6	33.5	11	64.7	17	100.0
15	0	0	0	0	7	41.2	10	58.8	17	100.0
16	0	0	1	5.9	8	47.1	8	47.1	17	94.2
17	0	0	0	0	11	64.7	6	35.3	17	100.0
18	0	0	0	0	7	41.2	10	58.8	17	100.0
19	0	0	0	0	10	58.8	7	41.2	17	100.0
20	0	0	0	0	6	35.3	11	64.7	17	100.0
Total	0		1		76		76		153	99.4

Note. % Agreement=agree and strongly agree.

In school A1, of 17 participants, 99.4% agreed with the items in the Shared Values and Vision dimension. In school A1, the mean score for the SVV dimension was 3.49 with a standard deviation of 0.51. The mean score fell between agree and strongly agree on the Likert scale.

Table 27

Respondents' Perceptions of Shared Values and Vision: School A2

Question #	SD		D		A		SA		Total	
	N	%	N	%	N	%	N	%	N	% Agreement
12	0	0	2	8.3	19	79.2	3	12.5	24	91.7
13	0	0	1	4.2	19	79.2	4	16.7	24	95.9
14	0	0	4	16.7	11	45.8	9	37.5	24	83.3
15	0	0	1	4.2	10	41.7	13	54.2	24	95.9
16	0	0	2	8.3	15	62.5	7	29.2	24	91.7
17	1	4.2	1	4.2	11	45.8	11	45.8	24	91.6
18	0	0	1	4.2	12	50.0	11	45.8	24	95.8
19	1	4.2	4	16.7	13	54.2	6	25.0	24	79.2
20	2	8.3	1	4.2	13	54.2	8	33.3	24	87.5
Total	4		17		123		72		216	90.3

Note. % Agreement=agree and strongly agree.

In school A2, of 24 participants, 90.3% agreed with the items in the Shared Values and Vision dimension. In school A2, the mean score for the SVV dimension was 3.22 with a standard deviation of 0.66. The mean score fell between agree and strongly agree on the Likert scale.

Table 28

Respondents' Perceptions of Shared Values and Vision: School A3

Question #	SD		D		A		SA		Total	
	N	%	N	%	N	%	N	%	N	% Agreement
12	0	0	3	13.0	18	78.3	2	8.7	23	87.0
13	0	0	2	8.7	20	87.0	1	4.3	23	91.3
14	0	0	3	13.0	16	69.6	4	17.4	23	87.0
15	0	0	1	4.3	14	60.9	8	34.8	23	95.7
16	0	0	3	13.0	17	74.0	3	13.0	23	87.0
17	0	0	0	0	11	47.8	12	52.2	23	100.0
18	0	0	1	4.3	19	82.6	3	13.0	23	95.6
19	0	0	5	21.7	15	65.2	3	13.0	23	78.2
20	0	0	1	4.3	18	78.3	4	17.4	23	95.7
Total	0		19		148		40		207	90.8

Note. % Agreement=agree and strongly agree.

In school A3, of 23 participants, 90.8% agreed with the items in the Shared Values and Vision dimension. In school A3, the mean score for the SVV dimension was 3.10 with a standard deviation of 0.53. The mean score fell between agree and strongly agree on the Likert scale.

Table 29

Respondents' Perceptions of Shared Values and Vision: School District B

Question #	SD		D		A		SA		Total	
	N	%	N	%	N	%	N	%	N	% Agreement
12	0	0	2	6.5	20	64.5	9	29.0	31	93.5
13	0	0	2	6.5	19	61.3	10	32.3	31	93.6
14	0	0	4	12.9	17	54.8	10	32.3	31	87.1
15	0	0	0	0	19	61.3	12	38.7	31	100.0
16	0	0	1	3.2	22	71.0	8	25.8	31	96.8
17	0	0	4	12.9	14	45.2	13	41.9	31	87.1
18	0	0	0	0	19	61.3	12	38.7	31	100.0
19	0	0	9	29.0	14	45.2	8	25.8	31	71.0
20	0	0	2	6.5	22	71.0	7	22.6	31	93.6
Total	0		24		166		89		279	91.4

Note. % Agreement=agree and strongly agree.

In School District B, of 31 participants, 91.4% agreed with the items in the Shared Values and Vision dimension. In School District B, the mean score for the SVV dimension was 3.23 with a standard deviation of 0.59. The mean score fell between agree and strongly agree on the Likert scale.

Table 30

Respondents' Perceptions of Shared Values and Vision: School B1

Question #	SD		D		A		SA		Total	
	N	%	N	%	N	%	N	%	N	% Agreement
12	0	0	1	14.3	3	42.9	3	42.9	7	85.8
13	0	0	1	14.3	3	42.9	3	42.9	7	85.8
14	0	0	0	0	5	71.4	2	28.6	7	100.0
15	0	0	0	0	4	57.1	3	42.9	7	100.0
16	0	0	0	0	5	71.4	2	28.6	7	100.0
17	0	0	1	14.3	3	42.9	3	42.9	7	85.8.0
18	0	0	0	0	5	71.4	2	28.6	7	100.0
19	0	0	3	42.9	3	42.9	1	14.3	7	57.2
20	0	0	1	14.3	4	57.1	2	28.6	7	85.7
Total	0		7		35		21		63	88.9

Note. % Agreement=agree and strongly agree.

In school B1, of seven participants, 88.9% agreed with the items in the Shared Values and Vision dimension. In school B1, the mean score for the SVV dimension was 3.22 with a standard deviation of 0.63. The mean score fell between agree and strongly agree on the Likert scale.

Table 31

Respondents' Perceptions of Shared Values and Vision: School B2

Question #	SD		D		A		SA		Total	
	N	%	N	%	N	%	N	%	N	% Agreement
12	0	0	0	0	9	64.3	5	35.7	14	100.0
13	0	0	0	0	7	50.0	7	50.0	14	100.0
14	0	0	0	0	6	42.9	8	57.1	14	100.0
15	0	0	0	0	6	42.9	8	57.1	14	100.0
16	0	0	0	0	8	57.1	6	42.9	14	100.0
17	0	0	1	7.1	4	28.6	9	64.3	14	92.9
18	0	0	0	0	6	42.9	8	57.1	14	100.0
19	0	0	0	0	7	50.0	7	50.0	14	100.0
20	0	0	1	7.1	8	57.1	5	35.7	14	92.8
Total	0		2		61		63		126	98.4

Note. % Agreement=agree and strongly agree.

In school B2, of 14 participants, 98.4% agreed with the items in the Shared Values and Vision dimension. In school B2, the mean score for the SVV dimension was 3.48 with a standard deviation of 0.53. The mean score fell between agree and strongly agree on the Likert scale.

Table 32

Respondents' Perceptions of Shared Values and Vision: School B3

Question #	SD		D		A		SA		Total	
	N	%	N	%	N	%	N	%	N	% Agreement
12	0	0	1	10.0	8	80.0	1	10.0	10	90.0
13	0	0	1	10.0	9	90.0	0	0	10	90.0
14	0	0	4	40.0	6	60.0	0	0	10	60.0
15	0	0	0	0	9	90.0	1	10.0	10	100.0
16	0	0	1	10.0	9	90.0	0	0	10	90.0
17	0	0	2	20.0	7	70.0	1	10.0	10	80.0
18	0	0	0	0	8	80.0	2	20.0	10	100.0
19	0	0	6	60.0	4	40.0	0	0	10	40.0
20	0	0	0	0	10	100.0	0	0	10	100.0
Total	0		15		70		5		90	83.3

Note. % Agreement=agree and strongly agree.

In school B3, of 10 participants, 83.3% agreed with the items in the Shared Values and Vision dimension. In school B3, the mean score for the SVV dimension was 2.89 with a standard deviation of 0.46. The mean score fell between disagree and agree on the Likert scale.

Findings from the Shared Values and Vision Dimension

The data showcase many similarities between the two school districts. The mean score was 3.25 in School District A and 3.23 in School District B. Both scores fell

between agree and strongly agree on the Likert scale. At the school level, with only one exception, all mean scores fell between agree and strongly agree. School B3 had a mean score of 2.89 for this dimension. The researcher interviewed an administrator from the school and from that gained a deeper understanding on the reason for this mean score. The administrator reviewed the questions within this dimension and said,

> Normally these types of things are discussed among the school leadership team and not everyone has input in this process. I feel sure that is why teachers do not feel like a collaborative process exists for some of these areas.

The total percentage in agreement from School District A was 92.5 and 91.4 from School District B. School B3 had the lowest positive response percentage within this dimension, which was 83.3. According to a member from the focus group, "Stakeholder input is something that is received sporadically."

Collective Learning and Application

In Tables 33, 34, 35, 36, 37, 38, 39, and 40, the researcher analyzed the frequency of percentages for the Collective Learning and Application dimension. Both district- and school-level views are showcased.

Table 33

Respondents' Perceptions of Collective Learning and Application: School District A

Question #	SD		D		A		SA		Total	
	N	%	N	%	N	%	N	%	N	% Agreement
21	0	0	5	7.8	48	75.0	11	17.2	64	92.2
22	1	1.6	0	0	48	75.0	15	23.4	64	98.4
23	0	0	8	12.5	37	57.8	19	29.7	64	87.5
24	0	0	13	20.3	38	59.4	13	20.3	64	79.9
25	0	0	8	12.5	41	64.1	15	23.4	64	87.5
26	0	0	4	6.3	44	68.8	16	25.0	64	93.8
27	1	1.6	13	20.3	39	60.9	11	17.2	64	78.1
28	0	0	2	3.1	41	64.1	21	32.8	64	96.9
29	3	4.7	7	10.9	43	67.2	11	17.2	64	84.4
30	2	3.1	8	12.5	39	60.9	15	23.4	64	84.3
Total	7		68		418		147		640	88.3

Note. % Agreement=agree and strongly agree.

In School District A, of 64 participants, 88.3% agreed with the items in the Collective Learning and Application dimension. In School District A, the mean score for the CLA dimension was 3.10 with a standard deviation of 0.61. The mean score fell between agree and strongly agree on the Likert scale.

Table 34

Respondents' Perceptions of Collective Learning and Application: School A1

Question #	SD		D		A		SA		Total	
	N	%	N	%	N	%	N	%	N	% Agreement
21	0	0	0	0	10	58.8	7	41.2	17	100.0
22	0	0	0	0	11	64.7	6	35.3	17	100.0
23	0	0	1	5.9	5	29.4	11	64.7	17	94.1
24	0	0	0	0	9	52.9	8	47.1	17	100.0
25	0	0	0	0	7	41.2	10	58.8	17	100.0
26	0	0	0	0	8	41.7	9	52.9	17	100.0
27	0	0	0	0	12	70.6	5	29.4	17	100.0
28	0	0	0	0	7	41.2	10	58.8	17	100.0
29	0	0	2	11.8	9	52.9	6	35.3	17	88.2
30	0	0	1	5.9	9	52.9	7	41.2	17	94.1
Total	0		4		87		79		170	97.6

Note. % Agreement=agree and strongly agree.

In school A1, of 17 participants, 97.6% agreed with the items in the Collective Learning and Application dimension. In school A1, the mean score for the CLA dimension was 3.44 with a standard deviation of 0.54. The mean score fell between agree and strongly agree on the Likert scale.

Table 35

Respondents' Perceptions of Collective Learning and Application: School A2

Question #	SD		D		A		SA		Total	
	N	%	N	%	N	%	N	%	N	% Agreement
21	0	0	4	16.7	17	70.8	3	12.5	24	83.3
22	0	0	0	0	19	79.2	5	20.8	24	100.0
23	0	0	4	16.7	16	66.7	4	16.7	24	83.4
24	0	0	8	33.3	12	50.0	4	16.7	24	66.7
25	0	0	4	16.7	16	66.7	4	16.7	24	83.4
26	0	0	4	16.7	18	75.0	2	8.3	24	83.3
27	1	4.2	7	29.2	13	54.2	3	12.5	24	66.7
28	0	0	2	8.3	16	66.7	6	25.0	24	91.7
29	2	8.3	3	12.5	16	66.7	3	12.5	24	79.2
30	1	4.2	3	12.5	14	58.3	6	25.0	24	83.3
Total	4		39		157		40		240	82.1

Note. % Agreement=agree and strongly agree.

In school A2, of 24 participants, 82.1% agreed with the items in the Collective Learning and Application dimension. In school A2, the mean score for the CLA dimension was 2.97 with a standard deviation of 0.63. The mean score fell between disagree and agree on the Likert scale.

Table 36

Respondents' Perceptions of Collective Learning and Application: School A3

Question #	SD		D		A		SA		Total	
	N	%	N	%	N	%	N	%	N	% Agreement
21	0	0	1	4.3	21	91.3	1	4.3	23	95.6
22	1	4.3	0	0	18	78.3	4	17.4	23	95.7
23	0	0	3	13.0	16	69.6	4	17.4	23	87.0
24	0	0	5	21.7	17	73.9	1	4.3	23	78.2
25	0	0	4	17.4	18	78.3	1	4.3	23	82.6
26	0	0	0	0	18	78.3	5	21.7	23	100.0
27	0	0	6	26.1	14	60.9	3	13.0	23	73.9
28	0	0	0	0	18	78.3	5	21.7	23	100.0
29	1	4.3	2	8.7	18	78.3	2	8.7	23	87.0
30	1	4.3	4	17.4	16	69.6	2	8.7	23	78.3
Total	3		25		174		28		230	87.8

Note. % Agreement=agree and strongly agree.

In school A3, of 23 participants, 87.8% agreed with the items in the Collective Learning and Application dimension. In school A3, the mean score for the CLA dimension was 2.99 with a standard deviation of 0.53. The mean score fell between disagree and agree on the Likert scale.

Table 37

Respondents' Perceptions of Collective Learning and Application: School District B

Question #	SD		D		A		SA		Total	
	N	%	N	%	N	%	N	%	N	% Agreement
21	0	0	2	6.5	19	61.3	10	32.3	31	93.6
22	0	0	2	6.5	18	58.1	11	35.5	31	93.6
23	0	0	2	6.5	16	51.6	13	41.9	31	93.5
24	0	0	5	16.1	16	51.6	10	32.3	31	83.9
25	0	0	4	12.9	17	54.8	10	32.3	31	87.1
26	0	0	2	6.5	18	58.1	11	35.5	31	93.6
27	0	0	8	25.8	16	51.6	7	22.6	31	74.2
28	0	0	1	3.2	18	58.1	12	38.7	31	96.8
29	1	3.2	7	22.6	16	51.6	7	22.6	31	74.2
30	0	0	8	25.8	14	45.2	9	29.0	31	74.2
Total	1		41		168		100		310	86.5

Note. % Agreement=agree and strongly agree.

In School District B, of 31 participants, 86.5% agreed with the items in the Collective Learning and Application dimension. In School District B, the mean score for the CLA dimension was 3.18 with a standard deviation of 0.66. The mean score fell between agree and strongly agree on the Likert scale.

Table 38

Respondents' Perceptions of Collective Learning and Application: School B1

Question #	SD		D		A		SA		Total	
	N	%	N	%	N	%	N	%	N	% Agreement
21	0	0	0	0	5	71.4	2	28.6	7	100.0
22	0	0	0	0	4	57.1	3	42.9	7	100.0
23	0	0	0	0	4	57.1	3	42.9	7	100.0
24	0	0	1	14.3	3	42.9	3	42.9	7	85.8
25	0	0	0	0	5	71.4	2	28.6	7	100.0
26	0	0	1	14.3	3	42.9	3	42.9	7	85.8
27	0	0	2	28.6	3	42.9	2	28.6	7	71.5
28	0	0	0	0	4	57.1	3	42.9	7	100.0
29	0	0	1	14.3	5	71.4	1	14.3	7	85.7
30	0	0	0	0	5	71.4	2	28.6	7	100.0
Total	0		5		41		24		70	92.9

Note. % Agreement=agree and strongly agree.

In school B1, of seven participants, 92.9% agreed with the items in the Collective Learning and Application dimension. In school B1, the mean score for the CLA dimension was 3.27 with a standard deviation of 0.59. The mean score fell between agree and strongly agree on the Likert scale.

Table 39

Respondents' Perceptions of Collective Learning and Application: School B2

Question #	SD		D		A		SA		Total	
	N	%	N	%	N	%	N	%	N	% Agreement
21	0	0	1	7.1	5	35.7	8	57.1	14	92.8
22	0	0	0	0	6	42.9	8	57.1	14	100.0
23	0	0	1	7.1	4	28.6	9	64.3	14	92.9
24	0	0	1	7.1	6	42.9	7	50.0	14	92.9
25	0	0	1	7.1	5	35.7	8	57.1	14	92.8
26	0	0	0	0	7	50.0	7	50.0	14	100.0
27	0	0	1	7.1	8	57.1	5	35.7	14	92.8
28	0	0	0	0	5	35.7	9	64.3	14	100.0
29	0	0	2	14.3	6	42.9	5	35.7	14	78.6
30	1	7.1	4	28.6	3	21.4	7	50.0	14	71.4
Total	1		11		55		73		140	91.4

Note. % Agreement=agree and strongly agree.

In school B2, of 14 participants, 91.4% agreed with the items in the Collective Learning and Application dimension. In school B2, the mean score for the CLA dimension was 3.43 with a standard deviation of 0.67. The mean score fell between agree and strongly agree on the Likert scale.

Table 40

Respondents' Perceptions of Collective Learning and Application: School B3

Question #	SD		D		A		SA		Total	
	N	%	N	%	N	%	N	%	N	% Agreement
21	0	0	1	10.0	9	90.0	0	0	10	90.0
22	0	0	2	20.0	8	80.0	0	0	10	80.0
23	0	0	1	10.0	8	80.0	1	10.0	10	90.0
24	0	0	3	30.0	7	70.0	0	0	10	70.0
25	0	0	3	30.0	7	70.0	0	0	10	70.0
26	0	0	1	10.0	8	80.0	1	10.0	10	90.0
27	0	0	5	50.0	5	50.0	0	0	10	50.0
28	0	0	1	10.0	9	90.0	0	0	10	90.0
29	0	0	4	40.0	5	50.0	1	10.0	10	60.0
30	0	0	4	40.0	6	60.0	0	0	10	60.0
Total	0		25		72		3		100	75.0

Note. % Agreement=agree and strongly agree.

In school B3, of 10 participants, 75.0% agreed with the items in the Collective Learning and Application dimension. In school B3, the mean score for the CLA dimension was 2.78 with a standard deviation of 0.48. The mean score fell between disagree and agree on the Likert scale.

Findings from the Collective Learning and Application Dimension

The data showcase many similarities between the two school districts. The total

percentage in agreement from School District A was 88.3 and 86.5 in School District B. School B3 had the lowest positive response percentage within this dimension, which was a 75.0.

The mean score was 3.10 in School District A and 3.18 in School District B. Both scores fell between agree and strongly agree on the Likert scale. At the school level, three of the six schools had mean scores that fell between agree and strongly agree. Schools A2, A3, and B3 had mean scores that fell between disagree and agree.

Question 27 (school staff members and stakeholders learn together and apply new knowledge to solve problems) had the lowest mean score and positive response percentage from all three schools. One teacher at the middle school level said,

> I don't think the systems are in place for collaboration with stakeholders and/or full community participation. Nor are there sufficient systems to allow for collaborative efforts among staff. It seems collaborative time to work on curriculum and teaching methods and to seriously reflect on such practices is lacking, though I don't think it has been intentionally overlooked. Time is an issue.

Through interviews and the focus-group session, the researcher determined that the consensus among the teachers at all schools was that teachers are still working in isolation. At both high school levels, the focus-group members contended that time only allows for teachers to meet and work directly with their team or department. One teacher said,

> Staff members want to work together for the betterment of students but are often very "set in their ways" and not willing to look at different ways of collecting data, analyzing data, etc. Although teacher autonomy is valued and protected, it

often seems to stand in the way of creating common formative assessments; therefore, data analysis is all but impossible.

Shared Personal Practice

In Tables 41, 42, 43, 44, 45, 46, 47, and 48, the researcher analyzed the frequency of percentages for the Shared Personal Practice dimension. Both district- and school-level views are showcased.

Table 41

Respondents' Perceptions of Shared Personal Practice: School District A

Question #	SD		D		A		SA		Total	
	N	%	N	%	N	%	N	%	N	% Agreement
31	4	6.3	18	28.1	35	54.7	7	10.9	64	65.6
32	2	3.1	17	26.6	38	59.4	7	10.9	64	70.3
33	0	0	3	4.7	41	64.1	20	31.3	64	95.4
34	2	3.1	20	31.3	30	46.9	12	18.8	64	65.7
35	1	1.6	11	17.2	38	59.4	14	21.9	64	81.3
36	1	1.6	7	10.9	39	60.9	17	26.6	64	87.5
37	2	3.1	24	37.5	31	48.4	7	10.9	64	59.3
Total	12		100		252		84		448	75.0

Note. % Agreement=agree and strongly agree.

In School District A, of 64 participants, 75.0% agreed with the items in the Shared Personal Practice dimension. In School District A, the mean score for the SPP dimension was 2.91 with a standard deviation of 0.71. The mean score fell between

disagree and agree on the Likert scale.

Table 42

Respondents' Perceptions of Shared Personal Practice: A1

Question #	SD		D		A		SA		Total	
	N	%	N	%	N	%	N	%	N	% Agreement
31	0	0	4	23.5	10	58.8	3	17.6	17	76.4
32	0	0	3	17.6	10	58.8	4	23.5	17	82.3
33	0	0	0	0	9	52.9	8	47.1	17	100.0
34	0	0	0	0	10	58.8	7	41.2	17	100.0
35	0	0	1	5.9	11	64.7	5	29.4	17	94.1
36	0	0	1	5.9	8	47.1	8	47.1	17	94.2
37	0	0	2	11.8	10	58.8	5	29.4	17	88.2
Total	0		11		68		40		119	90.7

Note. % Agreement=agree and strongly agree.

In school A1, of 17 participants, 90.7% agreed with the items in the Shared Personal Practice dimension. In school A1, the mean score for the SPP dimension was 3.24 with a standard deviation of 0.61. The mean score fell between agree and strongly agree on the Likert scale.

Table 43

Respondents' Perceptions of Shared Personal Practice: A2

Question #	SD		D		A		SA		Total	
	N	%	N	%	N	%	N	%	N	% Agreement
31	2	8.3	9	37.5	12	50.0	1	4.2	24	54.2
32	1	4.2	8	33.3	15	62.5	0	0	24	62.5
33	0	0	3	12.5	16	66.7	5	20.8	24	87.5
34	1	4.2	11	45.8	8	33.3	4	16.7	24	50.0
35	1	4.2	6	25.0	12	50.0	5	20.8	24	70.8
36	1	4.2	5	20.8	14	58.3	4	16.7	24	75.0
37	2	8.3	11	45.8	11	45.8	0	0	24	45.8
Total	8		53		88		19		168	63.7

Note. % Agreement=agree and strongly agree.

In school A2, of 17 participants, 63.7% agreed with the items in the Shared Personal Practice dimension. In school A2, the mean score for the SPP dimension was 2.70 with a standard deviation of 0.73. The mean score fell between disagree and agree on the Likert scale.

Table 44

Respondents' Perceptions of Shared Personal Practice: A3

Question #	SD		D		A		SA		Total	
	N	%	N	%	N	%	N	%	N	% Agreement
31	2	8.7	5	21.7	13	56.5	3	13.0	23	69.5
32	1	4.3	6	26.1	13	56.5	3	13.0	23	69.5
33	0	0	0	0	16	69.6	7	30.4	23	100.0
34	1	4.3	9	39.1	12	52.2	1	4.3	23	56.5
35	0	0	4	17.4	15	65.2	4	17.4	23	82.6
36	0	0	1	4.3	17	73.9	5	21.7	23	95.6
37	0	0	11	47.8	10	43.5	2	8.7	23	52.2
Total	4		36		96		25		161	75.1

Note. % Agreement=agree and strongly agree.

In school A3, of 23 participants, 75.1% agreed with the items in the Shared Personal Practice dimension. In school A3, the mean score for the SPP dimension was 2.88 with a standard deviation of 0.68. The mean score fell between disagree and agree on the Likert scale.

Table 45

Respondents' Perceptions of Shared Personal Practice: School District B

Question #	SD		D		A		SA		Total	
	N	%	N	%	N	%	N	%	N	% Agreement
31	0	0	9	29.0	16	51.6	6	19.4	31	71.0
32	0	0	10	32.3	14	45.2	7	22.6	31	67.8
33	0	0	0	0	17	54.8	14	45.2	31	100.0
34	0	0	8	25.8	18	58.1	5	16.1	31	74.2
35	0	0	6	19.4	18	58.1	7	22.6	31	80.7
36	0	0	6	19.4	19	61.3	6	19.4	31	80.7
37	0	0	12	38.7	14	45.2	5	16.1	31	61.3
Total	0		51		116		50		217	76.5

Note. % Agreement=agree and strongly agree.

In School District B, of 31 participants, 76.5% agreed with the items in the Shared Personal Practice dimension. In School District B, the mean score for the SPP dimension was 3.00 with a standard deviation of 0.68. The mean score is equivalent to agree on the Likert scale.

Table 46

Respondents' Perceptions of Shared Personal Practice: B1

Question #	SD		D		A		SA		Total	
	N	%	N	%	N	%	N	%	N	% Agreement
31	0	0	2	28.6	3	42.9	2	28.6	7	71.5
32	0	0	2	28.6	3	42.9	2	28.6	7	71.5
33	0	0	0	0	4	57.1	3	42.9	7	100.0
34	0	0	2	28.6	4	57.1	1	14.3	7	71.4
35	0	0	0	0	6	85.7	1	14.3	7	100
36	0	0	1	14.3	5	71.4	1	14.3	7	85.7
37	0	0	2	28.6	4	57.1	1	14.3	7	71.4
Total	0		9		29		11		49	81.6

Note. % Agreement=agree and strongly agree.

In school B1, of seven participants, 81.6% agreed with the items in the Shared Personal Practice dimension. In school B1, the mean score for the SPP dimension was 3.04 with a standard deviation of 0.64. The mean score fell between agree and strongly agree on the Likert scale.

Table 47

Respondents' Perceptions of Shared Personal Practice: B2

Question #	SD		D		A		SA		Total	
	N	%	N	%	N	%	N	%	N	% Agreement
31	0	0	3	21.4	7	50.0	4	28.6	14	78.6
32	0	0	4	28.6	5	35.7	5	35.7	14	71.4
33	0	0	0	0	5	35.7	9	64.3	14	100.0
34	0	0	2	14.3	8	57.1	4	28.6	14	85.7
35	0	0	2	14.3	7	50.0	5	35.7	14	85.7
36	0	0	2	14.3	7	50.0	5	35.7	14	85.7
37	0	0	3	21.4	7	50.0	4	28.6	14	78.6
Total	0		16		46		36		98	83.7

Note. % Agreement=agree and strongly agree.

In school B2, of 14 participants, 83.7% agreed with the items in the Shared Personal Practice dimension. In school B2, the mean score for the SPP dimension was 3.20 with a standard deviation of 0.70. The mean score fell between agree and strongly agree on the Likert scale.

Table 48

Respondents' Perceptions of Shared Personal Practice: B3

Question #	SD		D		A		SA		Total	
	N	%	N	%	N	%	N	%	N	% Agreement
31	0	0	4	40.0	6	60.0	0	0	10	60.0
32	0	0	4	40.0	6	60.0	0	0	10	60.0
33	0	0	0	0	8	80.0	2	20.0	10	100.0
34	0	0	4	40.0	6	60.0	0	0	10	60.0
35	0	0	4	40.0	5	50.0	1	10.0	10	60.0
36	0	0	3	30.0	7	70.0	0	0	10	70.0
37	0	0	7	70.0	3	30.0	0	0	10	30.0
Total	0		26		41		3		70	62.9

Note. % Agreement=agree and strongly agree.

In school B3, of 10 participants, 62.9% agreed with the items in the Shared Personal Practice dimension. In school B3, the mean score for the SPP dimension was 2.67 with a standard deviation of 0.56. The mean score fell between disagree and agree on the Likert scale.

Findings from the Shared Personal Practice Dimension

The data showcase many similarities between the two school districts. The mean score was 2.91 in School District A and 3.00 in School District B. The mean score for School District A fell between disagree and agree on the Likert scale. The mean score for School District B was equivalent to agree on the Likert scale. At the school level,

three of the six schools had mean scores that fell between agree and strongly agree. Schools A2, A3, and B3 had mean scores that fell between disagree and agree. The total percentage in agreement from School District A was 75.0 and 76.5 in School District B. Overall, this was the lowest rated dimension.

The schools involved in the study ranged from 62.9%-90.7% in agreement with this dimension. The data gathered from the survey, interviews, and focus groups indicate many reasons for this. Time was a primary factor for the low mean scores and percentages in this dimension. One teacher said, "I think this is a low area, because of our schedule. Shared planning does not work for observation, team teaching, etc." According to the focus groups in both districts, time and opportunities are not provided for teachers to collaborate and share practices. One teacher said, "It is difficult to facilitate this kind of interaction with as many responsibilities staff members have."

Supportive Conditions – Relationships

In Tables 49, 50, 51, 52, 53, 54, 55, and 56, the researcher analyzed the frequency of percentages for the Supportive Conditions – Relationships dimension. Both district- and school-level views are showcased.

Table 49

Respondents' Perceptions of Supportive Conditions - Relationships: School District A

Question #	SD		D		A		SA		Total	
	N	%	N	%	N	%	N	%	N	% Agreement
38	0	0	1	1.6	27	42.2	36	56.3	64	98.5
39	1	1.6	3	4.7	33	51.6	27	42.2	64	93.8
40	0	0	7	10.9	28	43.8	29	45.3	64	89.1
41	0	0	11	17.2	40	62.5	13	20.3	64	82.8
42	0	0	13	20.3	36	56.3	15	23.4	64	79.7
Total	1		35		164		120		320	88.8

Note. % Agreement=agree and strongly agree.

In School District A, of 64 participants, 88.8% agreed with the items in the Supportive Conditions – Relationships dimension. In School District A, the mean score for the SC-R dimension was 3.26 with a standard deviation of 0.66. The mean score fell between agree and strongly agree on the Likert scale.

Table 50

Respondents' Perceptions of Supportive Conditions - Relationships: School A1

Question #	SD		D		A		SA		Total	
	N	%	N	%	N	%	N	%	N	% Agreement
38	0	0	0	0	6	35.3	11	64.7	17	100.0
39	0	0	1	5.9	7	41.2	9	52.9	17	94.1
40	0	0	0	0	4	23.5	13	76.5	17	100
41	0	0	1	5.9	12	70.6	4	23.5	17	94.1
42	0	0	1	5.9	9	52.9	7	41.2	17	94.1
Total	0		3		38		44		85	96.5

Note. % Agreement=agree and strongly agree.

In school A1, of 17 participants, 96.5% agreed with the items in the Supportive Conditions – Relationships dimension. In school A1, the mean score for the SC-R dimension was 3.48 with a standard deviation of 0.57. The mean score fell between agree and strongly agree on the Likert scale.

Table 51

Respondents' Perceptions of Supportive Conditions - Relationships: School A2

Question #	SD		D		A		SA		Total	
	N	%	N	%	N	%	N	%	N	% Agreement
38	0	0	1	4.2	13	54.2	10	41.7	24	95.9
39	1	4.2	1	4.2	14	58.3	8	33.3	24	91.6
40	0	0	5	20.8	15	62.5	4	16.7	24	79.2
41	0	0	8	33.3	12	50.0	4	16.7	24	66.7
42	0	0	9	37.5	12	50.0	3	12.5	24	62.5
Total	1		24		66		29		120	79.2

Note. % Agreement=agree and strongly agree.

In school A2, of 24 participants, 79.2% agreed with the items in the Supportive Conditions – Relationships dimension. In school A2, the mean score for the SC-R dimension was 3.03 with a standard deviation of 0.69. The mean score fell between agree and strongly agree on the Likert scale.

Table 52

Respondents' Perceptions of Supportive Conditions - Relationships: School A3

Question #	SD		D		A		SA		Total	
	N	%	N	%	N	%	N	%	N	% Agreement
38	0	0	0	0	8	34.8	15	65.2	23	100
39	0	0	1	4.3	12	52.2	10	43.5	23	95.7
40	0	0	2	8.7	9	39.1	12	52.2	23	91.3
41	0	0	2	8.7	16	69.6	5	21.7	23	91.3
42	0	0	3	13.0	15	65.2	5	21.7	23	86.9
Total	0		8		60		47		115	93.0

Note. % Agreement=agree and strongly agree.

In school A3, of 23 participants, 93.0% agreed with the items in the Supportive Conditions – Relationships dimension. In school A3, the mean score for the SC-R dimension was 3.34 with a standard deviation of 0.61. The mean score fell between agree and strongly agree on the Likert scale.

Table 53

Respondents' Perceptions of Supportive Conditions - Relationships: School District B

Question #	SD		D		A		SA		Total	
	N	%	N	%	N	%	N	%	N	% Agreement
38	0	0	1	3.2	13	41.9	17	54.8	31	96.7
39	0	0	3	9.7	14	45.2	14	45.2	31	90.4
40	0	0	2	6.5	18	58.1	11	35.5	31	93.6
41	0	0	7	22.6	17	54.8	7	22.6	31	77.4
42	0	0	6	19.4	15	48.4	10	32.3	31	80.7
Total	0		19		77		59		155	87.8

Note. % Agreement=agree and strongly agree.

In School District B, of 31 participants, 87.8% agreed with the items in the Supportive Conditions – Relationships dimension. In School District B, the mean score for the SC-R dimension was 3.26 with a standard deviation of 0.66. The mean score fell between agree and strongly agree on the Likert scale.

Table 54

Respondents' Perceptions of Supportive Conditions - Relationships: School B1

Question #	SD		D		A		SA		Total	
	N	%	N	%	N	%	N	%	N	% Agreement
38	0	0	0	0	3	42.9	4	57.1	7	100.0
39	0	0	0	0	5	71.4	2	28.6	7	100.0
40	0	0	0	0	5	71.4	2	28.6	7	100.0
41	0	0	1	14.3	4	57.1	2	28.6	7	85.7
42	0	0	1	14.3	3	42.9	3	42.9	7	85.8
Total	0		2		20		13		35	94.3

Note. % Agreement=agree and strongly agree.

In school B1, of 7 participants, 94.3% agreed with the items in the Supportive Conditions – Relationships dimension. In school B1, the mean score for the SC-R dimension was 3.31 with a standard deviation of 0.58. The mean score fell between agree and strongly agree on the Likert scale.

Table 55

Respondents' Perceptions of Supportive Conditions - Relationships: School B2

Question #	SD		D		A		SA		Total	
	N	%	N	%	N	%	N	%	N	% Agreement
38	0	0	1	7.1	3	21.4	10	71.4	14	92.8
39	0	0	0	0	4	28.6	10	71.4	14	100.0
40	0	0	1	7.1	6	42.9	7	50.0	14	92.9
41	0	0	1	7.1	8	57.1	5	35.7	14	92.8
42	0	0	1	7.1	7	50.0	6	42.9	14	92.9
Total	0		4		28		38		70	94.3

Note. % Agreement=agree and strongly agree.

In school B2, of 14 participants, 94.3% agreed with the items in the Supportive Conditions – Relationships dimension. In school B2, the mean score for the SC-R dimension was 3.49 with a standard deviation of 0.61. The mean score fell between agree and strongly agree on the Likert scale.

Table 56

Respondents' Perceptions of Supportive Conditions - Relationships: School B3

Question #	SD		D		A		SA		Total	
	N	%	N	%	N	%	N	%	N	% Agreement
38	0	0	0	0	7	70.0	3	30.0	10	100.0
39	0	0	3	30.0	5	50.0	2	20.0	10	70.0
40	0	0	1	10.0	7	70.0	2	20.0	10	90.0
41	0	0	5	50.0	5	50.0	0	0	10	50.0
42	0	0	4	40.0	5	50.0	1	10.0	10	60.0
Total	0		13		29		8		50	74.0

Note. % Agreement=agree and strongly agree.

In school B3, of 10 participants, 74.0% agreed with the items in the Supportive Conditions – Relationships dimension. In school B3, the mean score for the SC-R dimension was 2.90 with a standard deviation of 0.65. The mean score fell between disagree and agree on the Likert scale.

Findings from the Supportive Conditions – Relationships Dimension

The data showcase many similarities between the two school districts. The mean score was 3.26 in School District A and 3.26 in School District B. This score fell between agree and strongly agree on the Likert scale. At the school level, with only one exception, all mean scores fell between agree and strongly agree. School B3 had a mean score of 2.90 for this dimension. The focus group contended that the lack of communication among staff members is the primary cause for the low mean and positive

response percentage for this dimension. One teacher said, "There is division among departments. For example, the Math Department and English Department are each a team, but they don't collaborate with each other."

The total percentage in agreement from School District A was 88.8 and 87.8 in School District B. Schools A2 and B3 had the lowest positive response percentages within this dimension. The positive response percentage from school A2 was 79.2. The positive response percentage from school B3 was 74.0.

Supportive Conditions – Structures

In Tables 57, 58, 59, 60, 61, 62, 63, and 64, the researcher analyzed the frequency of percentages for the Supportive Conditions – Structures dimension. Both district- and school-level views are showcased.

Table 57

Respondents' Perceptions of Supportive Conditions - Structures: School District A

Question #	SD		D		A		SA		Total	
	N	%	N	%	N	%	N	%	N	% Agreement
43	1	1.6	14	21.9	39	60.9	10	15.6	64	76.5
44	0	0	10	15.6	41	64.1	13	20.3	64	84.4
45	2	3.1	17	26.6	39	60.9	6	9.4	64	70.3
46	1	1.6	10	15.6	40	62.5	13	20.3	64	82.8
47	1	1.6	7	10.9	41	64.1	15	23.4	64	87.5
48	0	0	1	1.6	22	34.4	41	64.1	64	98.5
49	0	0	2	3.1	32	50.0	30	46.9	64	96.9
50	0	0	0	0	44	68.8	20	31.3	64	100.0
51	1	1.6	2	3.1	41	64.1	20	31.3	64	95.4
52	1	1.6	6	9.4	37	57.8	20	31.3	64	89.1
Total	7		69		376		188		640	88.1

Note. % Agreement=agree and strongly agree.

In School District A, of 64 participants, 88.1% agreed with the items in the Supportive Conditions – Structures dimension. In School District A, the mean score for the SC-S dimension was 3.16 with a standard deviation of 0.65. The mean score fell between agree and strongly agree on the Likert scale.

Table 58

Respondents' Perceptions of Supportive Conditions – Structures: School A1

Question #	SD		D		A		SA		Total	
	N	%	N	%	N	%	N	%	N	% Agreement
43	0	0	1	5.9	11	64.7	5	29.4	17	94.1
44	0	0	1	5.9	9	52.9	7	41.2	17	94.1
45	0	0	5	29.4	10	58.8	2	11.8	17	70.6
46	0	0	1	5.9	12	70.6	4	23.5	17	94.1
47	0	0	0	0	11	64.7	6	35.3	17	100.0
48	0	0	1	5.9	10	58.8	6	35.3	17	94.1
49	0	0	0	0	12	70.6	5	29.4	17	100.0
50	0	0	0	0	9	52.9	8	47.1	17	100.0
51	0	0	0	0	9	52.9	8	47.1	17	100.0
52	0	0	1	5.9	9	52.9	7	41.2	17	94.1
Total	0		10		102		58		170	94.1

Note. % Agreement=agree and strongly agree.

In school A1, of 17 participants, 94.1% agreed with the items in the Supportive Conditions – Structures dimension. In school A1, the mean score for the SC-S dimension was 3.28 with a standard deviation of 0.57. The mean score fell between agree and strongly agree on the Likert scale.

Table 59

Respondents' Perceptions of Supportive Conditions - Structures: School A2

Question #	SD		D		A		SA		Total	
	N	%	N	%	N	%	N	%	N	% Agreement
43	1	4.2	4	16.7	16	66.7	3	12.5	24	79.2
44	0	0	3	12.5	17	70.8	4	16.7	24	87.5
45	2	8.3	9	37.5	12	50.0	1	4.2	24	54.2
46	1	4.2	6	25.0	12	50.0	5	20.8	24	70.8
47	1	4.2	5	20.8	14	58.3	4	16.7	24	75.0
48	0	0	0	0	7	29.2	17	70.8	24	100.0
49	0	0	0	0	11	45.8	13	54.2	24	100.0
50	0	0	0	0	16	66.7	8	33.3	24	100.0
51	1	4.2	1	4.2	15	62.5	7	29.2	24	91.7
52	1	4.2	1	4.2	13	54.2	9	37.5	24	91.7
Total	7		29		133		71		240	85.0

Note. % Agreement=agree and strongly agree.

In school A2, of 24 participants, 85% agreed with the items in the Supportive Conditions – Structures dimension. In school A2, the mean score for the SC-S dimension was 3.12 with a standard deviation of 0.72. The mean score fell between agree and strongly agree on the Likert scale.

Table 60

Respondents' Perceptions of Supportive Conditions - Structures: School A3

Question #	SD		D		A		SA		Total	
	N	%	N	%	N	%	N	%	N	% Agreement
43	0	0	9	39.1	12	52.2	2	8.7	23	60.9
44	0	0	6	26.1	15	65.2	2	8.7	23	73.9
45	0	0	3	13.0	17	73.9	3	13.0	23	86.9
46	0	0	3	13.0	16	69.6	4	17.4	23	87.0
47	0	0	2	8.7	16	69.6	5	21.7	23	91.3
48	0	0	0	0	5	21.7	18	78.3	23	100.0
49	0	0	2	8.7	9	39.1	12	52.2	23	91.3
50	0	0	0	0	19	82.6	4	17.4	23	100.0
51	0	0	1	4.3	17	73.9	5	21.7	23	95.6
52	0	0	4	17.4	15	65.2	4	17.4	23	82.6
Total	0		30		141		59		230	87.0

Note. % Agreement=agree and strongly agree.

In school A3, of 23 participants, 87.0% agreed with the items in the Supportive Conditions – Structures dimension. In school A3, the mean score for the SC-S dimension was 3.13 with a standard deviation of 0.61. The mean score fell between agree and strongly agree on the Likert scale.

Table 61

Respondents' Perceptions of Supportive Conditions - Structures: School District B

Question #	SD		D		A		SA		Total	
	N	%	N	%	N	%	N	%	N	% Agreement
43	0	0	2	6.5	21	67.7	8	25.8	31	93.5
44	0	0	4	12.9	17	54.8	10	32.3	31	87.1
45	2	6.5	9	29.0	17	54.8	3	9.7	31	64.5
46	2	6.5	9	29.0	13	41.9	7	22.6	31	64.5
47	1	3.2	4	12.9	19	61.3	7	22.6	31	83.9
48	0	0	4	12.9	17	54.8	10	32.3	31	87.1
49	0	0	2	6.5	13	41.9	16	51.6	31	93.5
50	0	0	0	0	22	71.0	9	29.0	31	100.0
51	0	0	4	12.9	18	58.1	9	29.0	31	87.1
52	0	0	8	25.8	17	54.8	6	19.4	31	74.2
Total	5		46		174		85		310	83.5

Note. % Agreement=agree and strongly agree.

In School District B, of 31 participants, 83.5% agreed with the items in the Supportive Conditions – Structures dimension. In School District B, the mean score for the SC-S dimension was 3.09 with a standard deviation of 0.69. The mean score fell between agree and strongly agree on the Likert scale.

Table 62

Respondents' Perceptions of Supportive Conditions - Structures: School B1

Question #	SD		D		A		SA		Total	
	N	%	N	%	N	%	N	%	N	% Agreement
43	0	0	0	0	7	100	0	0	7	100.0
44	0	0	0	0	5	71.4	2	28.6	7	100.0
45	0	0	1	14.3	5	71.4	1	14.3	7	85.7
46	1	14.3	3	42.9	3	42.9	0	0	7	42.9
47	0	0	1	14.3	5	71.4	1	14.3	7	85.7
48	0	0	0	0	3	42.9	4	57.1	7	100.0
49	0	0	0	0	2	28.6	5	71.4	7	100.0
50	0	0	0	0	5	71.4	2	28.6	7	100.0
51	0	0	2	28.6	3	42.9	2	28.6	7	71.5
52	0	0	1	14.3	4	57.1	2	28.6	7	85.7
Total	1		8		42		19		70	87.2

Note. % Agreement=agree and strongly agree.

In school B1, of seven participants, 87.2% agreed with the items in the Supportive Conditions – Structures dimension. In school B1, the mean score for the SC-S dimension was 3.13 with a standard deviation of 0.66. The mean score fell between agree and strongly agree on the Likert scale.

Table 63

Respondents' Perceptions of Supportive Conditions - Structures: School B2

Question #	SD		D		A		SA		Total	
	N	%	N	%	N	%	N	%	N	% Agreement
43	0	0	1	7.1	7	50.0	6	42.9	14	92.9
44	0	0	2	14.3	6	42.9	6	42.9	14	85.8
45	1	7.1	5	35.7	6	42.9	2	14.3	14	57.2
46	1	7.1	5	35.7	4	28.6	4	28.6	14	57.2
47	1	7.1	2	14.3	8	57.1	3	21.4	14	78.5
48	0	0	0	0	8	57.1	6	42.9	14	100.0
49	0	0	1	7.1	4	28.6	9	64.3	14	92.9
50	0	0	0	0	8	57.1	6	42.9	14	100.0
51	0	0	0	0	8	57.1	6	42.9	14	100.0
52	0	0	4	28.6	6	42.9	4	28.6	14	71.5
Total	3		20		65		52		140	83.6

Note. % Agreement=agree and strongly agree.

In school B2, of 14 participants, 83.6% agreed with the items in the Supportive Conditions – Structures dimension. In school B2, the mean score for the SC-S dimension was 3.19 with a standard deviation of 0.75. The mean score fell between agree and strongly agree on the Likert scale.

Table 64

Respondents' Perceptions of Supportive Conditions - Structures: School B3

Question #	SD		D		A		SA		Total	
	N	%	N	%	N	%	N	%	N	% Agreement
43	0	0	1	10.0	7	70.0	2	20.0	10	90.0
44	0	0	2	20.0	6	60.0	2	20.0	10	80.0
45	1	10.0	3	30.0	6	60.0	0	0	10	60.0
46	0	0	1	10.0	6	60.0	3	30.0	10	90.0
47	0	0	1	10.0	6	60.0	3	30.0	10	90.0
48	0	0	4	40.0	6	60.0	0	0	10	60.0
49	0	0	1	10.0	7	70.0	2	20.0	10	90.0
50	0	0	0	0	9	90.0	1	10.0	10	100.0
51	0	0	2	20.0	7	70.0	1	10.0	10	80.0
52	0	0	3	30.0	7	70.0	0	0	10	70.0
Total	1		18		67		14		100	81.0

Note. % Agreement=agree and strongly agree.

In school B3, of 10 participants, 81% agreed with the items in the Supportive Conditions – Structures dimension. In school B3, the mean score for the SC-S dimension was 2.94 with a standard deviation of 0.60. The mean score fell between disagree and agree on the Likert scale.

Findings from the Supportive Conditions – Structures Dimension

The data showcase many similarities between the two school districts. The mean

score was 3.16 in School District A and 3.09 in School District B. These scores fell between agree and strongly agree on the Likert scale. At the school level, with only one exception, all mean scores fell between agree and strongly agree. School B3 had a mean score of 2.94 for this dimension. One teacher said, "The resources that are given to the school are fully utilized to support professional development. There is a need for improvements to the building and facilities." At B3, the focus group contended they had numerous improvement needs for their buildings and facilities. The group felt sure this was the cause for the low mean and positive response percentage on this dimension.

The total percentage in agreement from School District A was 88.1 and 83.5 from School District B. Schools B3 had the lowest positive response percentage within this dimension, which was an 81.0.

Structure and Themes from Interviews

The researcher interviewed six administrators and 36 teachers throughout the study. The interviews were approximately 20 minutes in length. Both administrators and teachers were randomly selected.

After reviewing and analyzing the information gathered from the interviews and focus groups, the researcher developed a frequency distribution on the themes mentioned. Table 65 displays the themes and how often these themes were mentioned during the throughout the interview and focus-group sessions.

Table 65

Frequency of Themes from Interviews and Focus Groups: All Schools

Themes	N	Percent
Collaboration	33	15.5
Reflective Practice	21	9.9
Teacher Morale	19	8.9
Shared Beliefs	19	8.9
Data-Driven Conversations	19	8.9
Common Goals	16	7.5
Improved Confidence	16	7.5
Trust	13	6.1
Teamwork	13	6.1
Shared Values	12	5.6
School Culture	10	4.7
Common Planning	9	4.2
Common Assessments	7	3.3
Motivation	6	2.8

As captured in Table 65, collaboration, reflective practice, teacher morale, shared beliefs, and data-driven conversations account for more than 50% of the themes most often mentioned throughout the interview and focus-group process. Some of the specific comments from the interviewees were noted earlier in this chapter. However, the researcher captured other comments that further elaborated on the above themes. One

teacher focused on reflective practice and the impact it has on his teaching practice.

> The idea of really going back and looking at what I have done and discussing it with my PLC has been very valuable. The art of reflection has made me really rethink what I am doing and how I am approaching concepts, standards, and students. From my experience, reflection is much more effective in a group where you all share a common goal and purpose.

Another teacher discussed the importance of collaboration: "Teachers continuously collaborate. Teachers collaborate formally and informally. Collaboration has built trust among teachers and administrators. It's what ties everyone together." One administrator focused on how shared beliefs influence teachers' confidence to perform:

> Shared beliefs are huge here. For example, our reading program is research based. Teachers believe in it. They have taken ownership of it, because they see the success it has brought to our students. This has increased teacher morale throughout the school.

One teacher discussed how data drives conversations:

> PLCs are grade level based this year. During these meetings we discuss the needs of students. We look at assessments and other data gathered by the classroom teacher or other teachers who are directly involved with the student. As a team, we discuss interventions to support the needs of the student. We are working toward common assessments. Bits and pieces are emerging.

Goodness of Fit

A Chi-Square goodness of fit test was calculated comparing a frequency of occurrence for each dimension on the PLCA-R for both school districts. Tables 66 and 67 provide the results of the Chi-Square tests for each school within both districts.

Table 66

Chi-Square Analysis on All Dimensions for School District A

Dimension	Chi-Square Value	Df	Asym. Sig
Shared and Supportive Leadership	42.043	38	.300
Shared Values and Vision	30.796	28	.326
Collective Learning and Application	42.360	36	.216
Shared Personal Practice	36.696	30	.186
Supportive Conditions – Relationships	22.838	18	.197
Supportive Conditions – Structures	34.722	28	.178

The information in Table 66 showcases the Chi-Square test results for school District A associated with each dimension from the PLCA-R. All of the dimensions had Chi-Square values that indicated they were not significant, meaning they were greater than .05. Therefore, the data are consistent with the expected values.

Table 67

Chi-Square Analysis on All Dimensions for School District B

Dimensions	Chi-Square Value	Df	Asym. Sig
Shared and Supportive Leadership	23.500	20	.265
Shared Values and Vision	26.000	20	.166
Collective Learning and Application	19.350	20	.499
Shared Personal Practice	13.125	16	.664
Supportive Conditions – Relationships	17.438	16	.358
Supportive Conditions – Structures	17.125	18	.515

The information in Table 67 showcases the Chi-Square test results for School District B associated with each dimension from the PLCA-R. All of the dimensions had Chi-Square values that indicated they were not significant, meaning they were greater than .05. Therefore, the data are consistent with the expected values.

Summary

The purpose of this study was to examine the perceived impact of PLCs on collective teacher efficacy in two rural western North Carolina school districts. The theoretical framework for this study began with the assumption that there was a direct linkage between PLCs and collective teacher efficacy.

For symmetrical purposes, research was conducted in two rural school districts in western North Carolina. The demographic data gathered throughout the study indicate many similarities between the survey populations in the two districts.

Throughout this chapter, the researcher analyzed the results of this study with

regard to the scoring of the PLCA-R. The researcher aligned the findings from the PLCA-R with the research questions that guided the framework for the study. For the purpose of this study, the survey items were aligned to each research question. In addition, the information gathered from the interviews and focus groups was used to triangulate the data. The PLCA-R data were presented globally and by school levels across all dimensions.

The data displayed in Table 9 show similar mean scores for each dimension in both school districts. With the exception of the SPP dimension in School District A, the mean scores fell between agree and strongly agree for each dimension. In addition, the SPP dimension had the lowest positive responses across all school levels.

The researcher created a frequency distribution table to capture the percentages of common occurrences of the themes mentioned throughout the interview process. Collaboration, reflective practice, teacher morale, shared beliefs, and data-driven conversations account for more than 50% of the themes most often mentioned throughout the interview process.

A Chi-Square goodness of fit test was calculated comparing a frequency of occurrence for each dimension on the PLCA-R for both school districts. All of the dimensions in both districts had Chi-Square values that indicated they were not significant. Therefore, the data are consistent with the expected values.

According to the results of this study, the six identified dimensions on the PLCA-R have a positive impact on collective teacher efficacy at all levels, especially at the elementary level.

Chapter 5: Conclusions, Recommendations, and Discussion

Purpose

The purpose of this study was to examine the perceived impact of PLCs on collective teacher efficacy in two rural western North Carolina school districts. The theoretical framework for this study began with the assumption that there was a direct linkage between PLCs and collective teacher efficacy.

The PLCA-R instrument that was utilized to collect data was described in detail in Chapter 3. Through the use of the PLCA-R, responses were obtained from 95 respondents. Of the 95 responses, 64 were from School District A and 31 were from School District B. The following questions guided the framework for this study.

1. What are teachers' and administrators' perceptions on the impact PLCs have on collective teacher efficacy?
2. What are teachers' and administrators' perceptions on the effectiveness of collective learning within a PLC?
3. What impact do supportive conditions within PLCs have on collective teacher efficacy?

Conclusions

When examining the mean scores by dimension for both school districts, the results show that five of the six dimensions had mean scores that fell between agree and strongly agree on the Likert scale. The Shared Personal Practice dimension was rated the lowest by both school districts. This information is a reflection of the data gathered from the PLCA-R surveys that were distributed to all participating schools.

The researcher identified questions directly related to collective teacher efficacy within every dimension on the survey. In addition, the researcher used information

gathered from the interviews and focus groups to triangulate the data. The interviews and focus groups corroborate the findings in the survey. The results of this study show that the six identified dimensions on the PLCA-R survey have a positive impact on collective teacher efficacy at all levels, especially at the elementary level. Overall, the elementary schools had the highest mean scores and positive response percentages on the PLCA-R survey.

Shared and Supportive Leadership

The Shared and Supportive Leadership dimension contained 11 questions about practices related to school administrators sharing power, authority, and decision making while promoting and nurturing leadership (Hipp & Huffman, 2010, p. 13). According to Hord (2004), "Supportive and shared leadership requires the collegial and facilitative participation of the principal who shares leadership – and thus, power and authority – by inviting staff input and action in decision-making" (p. 7).

The data gathered from the PLCA-R indicated that the majority of survey items had a high positive response percentage from all schools on this dimension. The total percentage in agreement for this dimension was 89.5 in School District A and 90.6 in School District B. The mean scores for both school districts fell between agree and strongly agree on the Likert scale. The mean score was 3.25 in School District A and 3.28 in School District B.

Based on research, data analysis, and findings, the researcher concluded that the majority of teachers at the elementary level felt that power, authority, and decision making were shared with them. The results of this study indicate that teachers at this level understand and believe they play a critical role in creating an environment that assumes responsibility for all students' success. One teacher at the elementary level said,

"Our grade level PLCs prove that leadership is shared and supported. We all have a voice. During our PLCs, we report the data that we have and as a team use it to drive our instruction."

Further investigation into the perceptions of teachers at the middle and high school level regarding survey items–opportunities for staff to initiate change, principal shares power and authority, and stakeholders assume shared responsibility–would be worthwhile since the positive response percentages for these items were the lowest. Based on this study, one can expect a need for further investigation in these areas at the middle and high school levels. One teacher at the middle school level left the following comment on the survey: "Administration does listen to teacher input at times, how much that influences their decision here, I am not sure. If I had a sometimes button I would have clicked on it a lot." Another teacher said, "We have committees, but at the end of the day we are consistently told that administration has the final say." In addition, the "if it ain't broke, don't fix it" quote was a common response from teachers at these levels during interviews and focus groups. One teacher said,

> Our district is known to be one of the top performing in the state. Our results continually showcase this, which is a great thing. However, you will often hear "if it ain't broke, don't fix it." I think we have a lot of room to exceed expectations if the mentality of our leaders was focused on what we can do to be even better.

Based on this study and the literature review, one can expect this type of mentality regarding resistance to change to negatively impact teacher responses at the middle and high school levels. According to Hord (2004), school administrators, along with teachers, must be learners continually seeking solutions for school improvement and

opportunities to increase student achievement (p. 7).

Shared Values and Vision

The Shared Values and Vision dimension contained nine questions about practices related to staff sharing visions that are focused on student learning and support norms of behavior that guide decisions about teaching and learning (Hipp & Huffman, 2010, p. 13). "Among the key features of a school community is a core of shared values about what students should learn, about how faculty and students should behave, and about the shared aims to maintain community" (Louis & Kruse, 1995, p. 16).

The data gathered from the PLCA-R indicated that the majority of survey items had a high positive response percentage from all schools on this dimension. The total percentage in agreement for this dimension was 92.5 in School District A and 91.4 in School District B. The mean scores for both school districts fell between agree and strongly agree on the Likert scale. The mean score was 3.25 in School District A and 3.23 in School District B.

Based on research, data analysis, and findings, the researcher concluded that the majority of teachers believe a shared vision for their school exists along with shared values and goals. One can expect to have the same findings with respect to the majority of teachers believing a shared vision for their school exists along with shared values and goals. One administrator said,

> You have to have a school-wide goal. Everyone has to work toward the same objective, which should always be student success. Every decision that is made should be focused on school safety and academic achievement. Everybody functions as a team. If one person succeeds, we all do. If one fails, we all do. Further investigation regarding stakeholders being actively involved in creating

high expectations for student learning would be worthwhile since the positive response percentages for this survey item were the lowest on this dimension for all schools. Based on the results of this study, one can expect to have the same findings with regard to stakeholders being actively involved in creating high expectations for student learning. Stakeholders are defined as parents and community members on the PLCA-R survey. One teacher said, "Stakeholder input is received sporadic." Another teacher said,

> We don't have a lot of involvement from our parents. We have great participation for programs and festivals, but I don't see parents involved in the daily education of their children. It does not seem to be a priority to many parents. Home and education are seen as two totally separate issues. Education ends at our doors.

DuFour and Eaker (1998) emphasized the importance of engaging parents, community members, business representatives, and students in the process of developing a mission statement (p. 68). The researcher concluded that all schools are going to have to be more creative in developing strategies to involve all stakeholders in the development of mission statements. Throughout this process, stakeholders will become more accountable and responsible for being actively involved in creating high expectations for student learning (DuFour & Eaker, 1998, p. 69).

Collective Learning and Application

The Collective Learning and Application dimension contained 10 questions about practices related to the staff sharing information and working collaboratively to plan, solve problems, and improve learning opportunities (Hipp & Huffman, 2010, p. 13). According to Hipp and Huffman (2010), a key to building a learning community within a school involves dedication to the process of inquiry and learning (p. 17). "As we learn together and as we inquire together, we create the ties that enable us to become a learning

community" (Sergiovanni, 1994, p. 167).

The data gathered from the PLCA-R indicated that the majority of survey items had a high positive response percentage from all schools on this dimension. This should influence the sense of community in a school (Hipp & Huffman, 2010, p. 17). "As teachers apply what they have learned, reflect on the process, and in turn, discuss the results of their practices, doors open to continuous learning through shared personal practice" (Hipp & Huffman, 2010, p. 17). The total percentage in agreement for this dimension was 88.3 in School District A and 86.5 in School District B. The mean scores for both school districts fell between agree and strongly agree on the Likert scale. The mean score was 3.10 in School District A and 3.18 in School District B.

Based on research, data analysis, and findings, the researcher concluded that the majority of teachers feel that collective learning exists among the staff members within their schools. Therefore, one can expect collaboration among staff members in the areas of sharing information, planning, solving problems, and improving learning opportunities (Hipp & Huffman, 2010, p. 13). Overall, the teachers at the elementary level rated this dimension slightly higher than teachers at the middle and high school levels. One teacher at the elementary level said, "All of our grade levels function as PLCs. Team members work together to improve their teaching and increased student achievement." Throughout the study, the researcher concluded, based on the findings, that the elementary schools had a deeper understanding of the PLC concept than the middle and high schools. At the middle and high school levels, the researcher concluded that many teachers are still working in isolation. Therefore, teacher morale and teacher efficacy is negatively impacted (LaPrade, n.d., p. 3). One teacher at the middle school level said,

My team decided on our own to read a book on strategies that engage students,

> promote active learning and boost achievement because we had a negative start to the year due to administrative issues and we decided that we needed to give ourselves a positive focus. It's been great, but there was no administrative leadership or guidance to encourage us to do this.

According to Balls et al. (2011), the behaviors and expectations showcased by the leader have a direct impact on the development of a learning culture (p. 95). Based on the study findings, the researcher concluded that the administrators at the middle and high school levels have not taken the stance of being a learning leader. Therefore, teacher collaboration and student learning is negatively impacted (DuFour & Marzano, 2009, p. 68). When principals become learning leaders, they focus on learning and utilizing evidence of learning to strengthen and improve professional practice (DuFour & Marzano, 2009, p. 63).

Shared Personal Practice

The Shared Personal Practice dimension contained seven questions about practices related to opportunities for peers to meet and observe one another to provide feedback on instructional practices, to assist in student learning, and to increase human capacity (Hipp & Huffman, 2010, p. 13). According to Schlechty (1997), "Teachers, like other, leaders, should be evaluated and assessed on the basis of what they get others to do, not on what they do themselves" (p. 185).

The data gathered from the PLCA-R showed this dimension had the lowest positive response percentages from all schools. The total percentage in agreement for this dimension was 75.0 in School District A and 66.5 in School District B. The mean score was 2.91 in School District A and 3.00 in School District B. The mean score for School District A fell between disagree and agree on the Likert scale. The mean score

for School District B was equivalent to agree on the Likert scale.

Based on research, data analysis, and findings, the researcher concluded that the majority of teachers do not feel that time is provided for them to observe others, provide feedback, and share/review student work. When time is an issue, one can expect teachers to not always be committed to the work of increasing student learning (Hipp & Huffman, 2010 p. 18). One teacher said,

> I think this is an area that is being worked on. I think that some of these things are done informally, however, I think that cross-grade level opportunities could help staff understand where students are coming from and where they need to go.

A teacher at the elementary level said, "The vertical alignment things we have done have brought awareness to all teachers. The more we talk and communicate with each other, the more successful we are. Students benefit when teachers understand and support each other." Overall, survey items regarding these types of opportunities were rated the lowest. Throughout interviews and focus groups, the researcher continually heard, "it's a time issue" or "it's a scheduling issue." One teacher said, "Again, I think it's a time issue. Beyond that, it is very difficult to get teachers to share their work and take constructive input from others." Another teacher said, "Time just does not allow for us to observe each other." Based on study findings, the researcher concluded the administrators within the schools do not value these types of opportunities. According to Hipp and Huffman (2010), "An environment that values such endeavors is enhanced by processes that encourage teachers to shares their personal practices with one another" (p. 18). These types of activities are highly valued and transparent within PLCs (Hipp & Huffman, 2010, p. 18). The researcher concludes that there is a lack of understanding of PLCs within the schools.

Supportive Conditions – Relationships

The Supportive Conditions – Relationships dimension contained five questions about relationships that exist among the entire school community (Hipp & Huffman, 2010, p. 13). Huffman and Hipp (2003) emphasized the importance of this dimension: "Without creating a culture of trust, respect, and inclusiveness with a focus on relationships, even the most innovative means of finding time, resources and developing communication systems will have little effect on creating a community of learners" (p. 146).

The data gathered from the PLCA-R indicated that the majority of survey items had a high positive response percentage from all schools on this dimension. The total percentage in agreement for this dimension was 88.8 in School District A and 87.8 in School District B. The mean scores for both school districts fell between agree and strongly agree on the Likert scale. The mean score was 3.26 in School District A and 3.26 in School District B.

Based on research, data analysis, and findings, the researcher concluded that the majority of teachers contend that positive caring relationships exist among their entire school community. As a result of this, teachers are able to find help, support, and trust among their colleagues (Hipp & Huffman, 2010, p. 21). One administrator said,

> Our slogan for this school year is trust. There is a lot of trust in that students will step up and do what you need them to do when it gets down to it. Same thing with teachers, people rely on one another. This has proven time and time again to be a very positive piece of our faculty. We can count on students and students believe they can count on teachers. Teachers understand that we are here for students and to enhance learning. When we examine data, everyone is on the

same page. Our goal is always to enhance student learning.

"Trust matters because the quality of interpersonal relationship between adults in the school setting influences not only the climate and morale, but also makes a difference with student achievement" (Hipp & Huffman, 2010, p. 20). One teacher said,

> We have a culture of trust in our school. What we are doing academically is working. Our results indicate success yearly. When facing challenges, teachers trust and understand that they just have to keep doing what is best for students, which is what we do every day.

Further investigation into the perceptions of teachers at the middle and high school level regarding survey items 41 (school staff and stakeholders exhibit a sustained and unified effort to embed change into the culture of the school) and 42 (relationships among staff members support honest and respectful examination of data to enhance teaching and learning) would be worthwhile since the positive response percentages for these items were the lowest. Based on the findings from this study, one can expect the same perceptions in these areas at the middle and high school level. One teacher at the middle school level said,

> Parental involvement is limited to parents contacting the school or the school contacting the parents when a grade is a problem. I am not aware of a PTO or another organization that allows parents or community members to be involved in school decisions.

Based on the study findings, the researcher concluded that schools, especially middle and high school levels, should be more creative in developing strategies to involve all stakeholders. According to DuFour and Eaker (1998), schools increase their likelihood of success by involving all stakeholders (p. 68). Throughout this process, stakeholders

will become more accountable and responsible (DuFour & Eaker, 1998, p. 69). In addition, the researcher concluded that lack of communication and collaboration among teachers at the middle and high school levels was a problem. One teacher said, "Unless you are on the same team or within the same department, you really have no idea what other people are doing in the building." Another teacher said, "There is division among departments. For example, the Math Department and English Department are each a team, but they don't collaborate with each other." According to Heick (2013), "Teacher collaboration is a catalyst for teacher improvement (p. 2).

Supportive Conditions – Structures

The Supportive Conditions – Structures dimension contained 10 questions about the systems and resources that are in place that enable staff to meet and examine practices and student outcomes (Hipp & Huffman, 2010, p. 13). According to Hipp and Huffman (2010), "Time for teachers to work together is essential for school reform initiative" (p. 19).

The data gathered from the PLCA-R indicated that the majority of survey items had a high positive response percentage from all schools on this dimension. The total percentage in agreement for this dimension was 88.1 in School District A and 83.5 in School District B. The mean scores for both school districts fell between agree and strongly agree on the Likert scale. The mean score was 3.16 in School District A and 3.09 in School District B.

Based on research, data analysis, and findings, the researcher concluded that the primary areas of concern within this dimension were the following survey items: time provided to facilitate collaborative work, fiscal resources are available for professional development, and appropriate technology and instructional materials are available to

staff. According to research, these three actions are needed to support communities of learners (Hipp & Huffman, 2010, p. 19). As mentioned earlier, throughout interviews and focus groups, the researcher continually heard "it's a time issue" or "it's a scheduling issue." The researcher concluded that teacher schedules, especially at the middle and high schools, need to be reviewed and revised by administration in order to provide teachers collaborative working time. According to DuFour and Eaker (1998), "The school that hopes to become a professional learning community must provide teachers with time to reflect, to engage in collective inquiry, to collaborate, and to participate in continuous improvement processes" (p. 123).

In addition, the researcher concluded, based on interview responses from administrators and teachers, that budget cuts at the state level have impacted school district spending allotments. One teacher said, "Continuous learning is something that teachers have to do for themselves here. It is not required or provided. We are told every year that our professional development is embedded." One administrator said, "Professional development opportunities are limited. We try to be creative in this area and use our own people when necessary and appropriate." Budget cuts have also forced districts to cut back significantly on spending for instructional materials. One teacher said, "The English Department is strained to function with a minimal number of books that are in very poor condition. I have a SmartBoard that has expired licensing and doesn't function. It is basically a glorified screen."

Recommendations

It is recommended that both school districts host PLC training at the district and school level. The researcher recommends that the process begin by engaging school principals. Research says engaging school principals leads to students learning at higher

levels (DuFour & Marzano, 2009, p. 68). PLCs will have to be established as priorities from district leadership. Principals will need to actively participate in the planning and development of the PLC rollout.

> When principals at the district-level principal team meetings have engaged in and practiced the work that is expected of the teacher teams back in their schools, they are in a much better position to assist teacher teams back in their schools, they are in a much better position to assist teacher teams in doing the complex work of improving student learning. (Eaker & Keating, 2012, p. 106)

According to the DuFour, DuFour, Eaker, and Many (2010),

> Superintendents cannot implement the process throughout a district unless they build the capacity of principals to lead it in their schools. Principals will not develop their schools as high performing unless they develop the knowledge and skills of key staff members to lead the collaborative work essential to PLCs. (p. 2)

The researcher recommends every school identify a pilot group to be trained. These groups will create a center of excellence for the implementation of PLCs coming out of the pilot program. This will provide consistency and a needed resource for guidance and support. The pilot group will be a strong grade level or department selected by the principal. Training will involve using videos of high-quality run PLCs as exemplars. Each group will be provided a support team from the district office. Upon completion, each pilot group will implement PLCs for one school year. Throughout the first year of implementation, all teachers in the building will have the opportunity to observe the pilot group. The pilot-group sessions will also be recorded for professional development purposes. The researcher recommends that the pilot group lead professional development

sessions for the staff throughout the school year. Upon completion, the pilot group will complete an after-action review. During this review and reflection, the pilot group participants will discuss things that worked, things that need to be changed, and the changes that will be made. "Anyone part of such a process, or anyone who has seen first-rate teachers engage in reflective practice together, knows its power and excitement" (Evans, 2001, p. 232).

Teachers and administrators will gain a deeper understanding of the PLC concept throughout the first year and will be able to formally implement PLCs in the upcoming school year. Members of PLCs are action-oriented (DuFour, DuFour, Eaker, & Many, 2010, p. 12). They understand taking action is the most powerful way to learn (DuFour, DuFour, Eaker, & Many, 2010, p. 12). After the first year of implementation, the researcher recommends that every grade level begin functioning as a PLC. Feedback will be provided through teacher evaluations from the principal. Schools will not progress on the PLC continuum until people in the school begin to "do" differently (DuFour, DuFour, Eaker, & Many, 2010, p. 51). The administrative team should continue providing professional development and training sessions as needed.

It is recommended that the Shared Personal Practice dimension and questions within be addressed throughout both districts. As noted earlier in Chapter 5, the Shared Personal Practice dimension contained seven questions about practices related to opportunities for peers to meet and observe one another to provide feedback on instructional practices, to assist in student learning, and to increase human capacity (Hipp & Huffman, 2010, p. 13). This dimension had the lowest mean scores and positive response percentages at all schools involved in the study. Huffman and Hipp (2003) emphasized the importance of shared personal practice (p. 80). "Shared personal practice

is the key to changing what occurs in the classroom, and this is at the heart of school improvement" (Huffman & Hipp, 2003, p. 80). The researcher recommends that school principals review the items within this dimension and revise teacher schedules so they have time and opportunities to share personal practices.

It is recommended for schools to develop a stakeholder engagement plan to improve collaboration among all stakeholders. Eaker and Keating (2012) described collaborative teams as the "heart and soul" of a district that is seeking to improve student achievement (p. 105). In order for teams to be collaborative, they require time–time to work together (Eaker & Keating, 2012, p. 105). This was identified as an area of weakness throughout all dimensions. The researcher recommends that schools work together to establish multiple connections and community partners. District- and school-level leaders should facilitate this process. School leaders should continually seek out ways to involve parents and community members in various task forces, site committees, and planning groups within the school (Hipp & Huffman, 2010, p. 130). In addition, the researcher recommends schools periodically acknowledge the efforts of all stakeholders and encourage continuous involvement through a variety of appreciation activities.

According to the results of this study, the six identified dimensions on the PLCA-R have a positive impact on collective teacher efficacy at all levels, especially at the elementary level. The researcher recommends that teachers and administrators within both districts continue educating themselves on the PLC concept and improving their PLCs practices.

Recommendations for Further Research

The purpose of this study was to examine the perceived impact of PLCs on collective teacher efficacy in two rural western North Carolina school districts. One

elementary, middle, and high school from each district were involved in the study. Through surveys, interviews, and focus groups, the researcher was able to gain an understanding about teacher and administrator perceptions related to the impact PLCs have on collective teacher efficacy. All certified teachers and administrators had an opportunity to complete the survey. Interview and focus-group participants were randomly selected. The following recommendations may assist future researchers if they decide to continue exploring this topic.

1. Examine the perceived impact of PLCs on collective teacher efficacy in two urban North Carolina school districts.
2. Expand the study to include states other than North Carolina where PLCs have been implemented.
3. Expand the study to include private and/or charter schools.

Limitations

Limitations have been identified in three areas of this study. First, the survey was administered in January during EOC testing at the high schools. The timing of the survey might have impacted the number of responses. Second, the survey was open for 2 weeks in both districts. In School District B, due to the weather and school being out of session, the researcher extended the survey. This provided one school district more time to respond to the survey.

Lastly, the study involved two similar rural county school districts in western North Carolina; therefore, generalizations do not necessarily apply to other areas across the nation.

Summary

The purpose of this study was to examine the perceived impact of PLCs on

collective teacher efficacy in two rural western North Carolina school districts. The researcher used data collected from the survey, interviews, and focus groups to triangulate the data and draw conclusions. The interviews and focus groups corroborate the findings in the survey. The results of this study show that the six identified dimensions on the PLCA-R survey have a positive impact on collective teacher efficacy at all levels, especially at the elementary level.

The researcher recommends that both school districts revisit and reenergize the implementation of PLCs at the district and school level. In addition, the results from the Shared Personal Practice dimension should be reviewed and an action plan with measurable objectives should be developed to improve the overall attributes. Finally, the researcher recommends that both school districts develop a stakeholder engagement plan to improve overall collaboration among stakeholders. For further research, the researcher made three recommendations of ways to expand this study. Limitations were identified in three areas: time of year, survey extension, and study population.

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Appendix A

Professional Learning Communities Assessment-Revised Survey

Professional Learning Communities Assessment-Revised

Directions:
This questionnaire assesses your perceptions about your principal, staff, and stakeholders based on the dimensions of a professional learning community (PLC) and related attributes. This questionnaire contains a number of statements about practices which occur in some schools. Read each statement and then use the scale below to select the scale point that best reflects your personal degree of agreement with the statement. Shade the appropriate oval provided to the right of each statement. Be certain to select only one response for each statement. Comments after each dimension section are optional.

Key Terms:
- Principal=Principal, not Associate or Assistant Principal
- Staff/Staff Members=All adult staff directly associated with curriculum, instruction, and assessment of students
- Stakeholders=Parents and community members

Scale: 1=Strongly Disagree (SD)
2=Disagree (D)
3=Agree (A)
4=Strongly Agree (SA)

STATEMENTS		**SCALE**			
	Shared and Supportive Leadership	**SD**	**D**	**A**	**SA**
1.	Staff members are consistently involved in discussing and making decisions about most school issues.	0	0	0	0
2.	The principal incorporates advice from staff members to make decisions.	0	0	0	0
3.	Staff members have accessibility to key information.	0	0	0	0
4.	The principal is proactive and addresses areas where support is needed.	0	0	0	0
5.	Opportunities are provided for staff members to initiate change.	0	0	0	0
6.	The principal shares responsibility and rewards for innovative actions.	0	0	0	0
7.	The principal participates democratically with staff sharing power and authority.	0	0	0	0
8.	Leadership is promoted and nurtured among staff members.	0	0	0	0

9.	Decision-making takes place through committees and communication across grade and subject areas.	0	0	0	0
10.	Stakeholders assume shared responsibility and accountability for student learning without evidence of imposed power and authority.	0	0	0	0
11.	Staff members use multiple sources of data to make decisions about teaching and learning.	0	0	0	0
COMMENTS:					

	STATEMENTS	**SCALE**			
	Shared Values and Vision	**SD**	**D**	**A**	**SA**
12.	A collaborative process exists for developing a shared sense of values among staff.	0	0	0	0
13.	Shared values support norms of behavior that guide decisions about teaching and learning.	0	0	0	0
14.	Staff members share visions for school improvement that have an undeviating focus on student learning.	0	0	0	0
15.	Decisions are made in alignment with the school's values and vision.	0	0	0	0
16.	A collaborative process exists for developing a shared vision among staff.	0	0	0	0
17.	School goals focus on student learning beyond test scores and grades.	0	0	0	0
18.	Policies and programs are aligned to the school's vision.	0	0	0	0
19.	Stakeholders are actively involved in creating high expectations that serve to increase student achievement.	0	0	0	0
20.	Data are used to prioritize actions to reach a shared vision.	0	0	0	0
COMMENTS:					

	Collective Learning and Application	**SD**	**D**	**A**	**SA**
21.	Staff members work together to seek knowledge, skills and strategies and apply this new learning to their work.	0	0	0	0
22.	Collegial relationships exist among staff members that reflect commitment to school improvement efforts.	0	0	0	0
23.	Staff members plan and work together to search for solutions to address diverse student needs.	0	0	0	0
24.	A variety of opportunities and structures exist for collective learning through open dialogue.	0	0	0	0
25.	Staff members engage in dialogue that reflects a respect for diverse ideas that lead to continued inquiry.	0	0	0	0
26.	Professional development focuses on teaching and learning.	0	0	0	0
27.	School staff members and stakeholders learn together and apply new knowledge to solve problems.	0	0	0	0
28.	School staff members are committed to programs that enhance learning.	0	0	0	0
29.	Staff members collaboratively analyze multiple sources of data to assess the effectiveness of instructional practices.	0	0	0	0
30.	Staff members collaboratively analyze student work to improve teaching and learning.	0	0	0	0
COMMENTS:					

	STATEMENTS	**SCALE**			
	Shared Personal Practice	**SD**	**D**	**A**	**SA**
31.	Opportunities exist for staff members to observe peers and offer encouragement.	0	0	0	0
32.	Staff members provide feedback to peers related to instructional practices.	0	0	0	0
33.	Staff members informally share ideas and suggestions	0		0	0

	for improving student learning.		0		
34.	Staff members collaboratively review student work to share and improve instructional practices.	0	0	0	0
35.	Opportunities exist for coaching and mentoring.	0	0	0	0
36.	Individuals and teams have the opportunity to apply learning and share the results of their practices.	0	0	0	0
37.	Staff members regularly share student work to guide overall school improvement.	0	0	0	0
COMMENTS:					
	Supportive Conditions - Relationships	**SD**	**D**	**A**	**SA**
38.	Caring relationships exist among staff and students who are built on trust and respect.	0	0	0	0
39.	A culture of trust and respect exists for taking risks.	0	0	0	0
40.	Outstanding achievement is recognized and celebrated regularly in our school.	0	0	0	0
41.	School staff and stakeholders exhibit a sustained and unified effort to embed change into the culture of the school.	0	0	0	0
42.	Relationships among staff members support honest and respectful examination of data to enhance teaching and learning.	0	0	0	0
COMMENTS:					
	Supportive Conditions - Structures	**SD**	**D**	**A**	**SA**
43.	Time is provided to facilitate collaborative work.	0	0	0	0
44.	The school schedule promotes collective learning and shared practice.	0	0	0	0

45.	Fiscal resources are available for professional development.	0	0	0	0
46.	Appropriate technology and instructional materials are available to staff.	0	0	0	0
	STATEMENTS	**SCALE**			
		SD	**D**	**A**	**SA**
47.	Resource people provide expertise and support for continuous learning.	0	0	0	0
48.	The school facility is clean, attractive and inviting.	0	0	0	0
49.	The proximity of grade level and department personnel allows for ease in collaborating with colleagues.	0	0	0	0
50.	Communication systems promote a flow of information among staff members.	0	0	0	0
51.	Communication systems promote a flow of information across the entire school community including: central office personnel, parents, and community members.	0	0	0	0
52.	Data are organized and made available to provide easy access to staff members.	0	0	0	0
COMMENTS:					

Source: Olivier, D. F., Hipp, K. K., & Huffman, J. B. (2010). Assessing and analyzing schools. In K. K. Hipp & J. B. Huffman (Eds.). *Demystifying professional learning communities: School leadership at its Best.* Lanham, MD: Rowman & Littlefield.

Appendix B

Letter of Permission to Utilize PLCA-R Survey Instrument

Department of Educational Foundations and Leadership
P.O. Box 43091
Lafayette, LA 70504-3091

December 12, 2015

Katie Bailey

Dear Ms. Bailey:

This correspondence is to grant permission to utilize the *Professional Learning Community Assessment-Revised* (PLCA-R) as your instrument for data collection for your doctoral study through Gardner-Webb University. I believe your research examining *teachers' perceptions of the impact of the professional learning community process within each specific study school* will contribute to the PLC literature, as well as inform rural-based research. I am pleased that you are interested in using the PLCA-R measure in your research.

This permission letter allows use of the PLCA-R through paper/pencil administration, as well as permission for the PLCA-R online version. For administration of the PLCA-R online version, services **must** be secured through our online host, SEDL in Austin, TX. Additional information for online administration can be found at www.sedl.org. While this letter provides permission to use the measure in your study, authorship of the measure will remain as Olivier, Hipp, and Huffman (exact citation on the following page). This permission does not allow renaming the measure or claiming authorship.

Upon completion of your study, I would be interested in learning about your entire study and would welcome the opportunity to receive an electronic version of your completed dissertation research.

Thank you for your interest in our research and measure for assessing professional learning community attributes within schools. Should you require any additional information, please feel free to contact me.

Sincerely,
Dianne F. Olivier

Dianne F. Olivier, Ph. D.
Associate Professor/Coordinator of the Doctoral Program
Joan D. and Alexander S. Haig/BORSF Professor
Department of Educational Foundations and Leadership
College of Education
University of Louisiana at Lafayette
P.O. Box 43091
Lafayette, LA 70504-3091
(337) 482-6408 (Office) dolivier@louisiana.edu

Appendix C

Interview Questions

1. What do you do when student can't or don't learn? What does your PLC do?
2. What do you do when you feel there are not adequate resources? What does your PLC do?
3. How have shared beliefs influenced your confidence to perform?
4. How has reflective practice influence your confidence to perform?
5. How has collective efficacy aided teachers (and your PLC) at different grade levels when facing different challenges?

Appendix D

Formal Letter of Permission to School District A

December 9, 2015

Mr. XXXXX XXXXXX
Curriculum Director
XXX XXXX XXXXX Street
XXXXXXXX, NC XXXXX

RE: Permission to Conduct Research Study

Dear Mr. XXXXXX,

I am currently enrolled in the Doctor of Education in Educational Leadership program at Gardner-Webb University. I am requesting permission to conduct research at XXXX XXXXXXX Elementary School, XXXX XXXXXX Middle School, and XXXX XXXXXX High School. Research will be conducted in the spring of 2016 for my study titled, *The Perceived Impact of Professional Learning Communities on Collective Teacher Efficacy in Two Rural Western North Carolina School Districts.*

The purpose of this study was to examine the perceived impact of professional learning communities on collective teacher efficacy. The Professional Learning Communities Assessment-Revised (PLCA-R) survey instrument, interviews, and focus groups will be utilized. To maintain confidentiality, names of the schools, participant information, and district will be changed.

I would like to begin data collection in January 2016. Please contact me via email at XXXXXXXX@gardner-webb.edu or phone (XXX-XXX-XXXX) regarding any thoughts, questions, or concerns you have. Your approval to conduct this study, and contribution to the data, will be valued and greatly appreciated.

Sincerely,

Katie Bailey

Appendix E

Formal Letter Granting Permission from School District A

December 10, 2015

Dear Katie Bailey:

Thank you for your request to engage in research involving XXXX XXXXXX Schools. On behalf of our district and schools I am affirming that you have permission to conduct your research on *The Perceived Impact of Professional Learning Communities on Collective Teaching Efficacy in Two Rural Western North Carolina School Districts* at XXXX XXXXXXX Elementary, XXXX XXXXXX Middle, and XXXX XXXXXX High. I will inform principals and staff of this agreement and encourage participation. Please provide me with a timeline of events including surveys, interviews, and focus groups once you have finalized them.

I believe our participation in this study and your findings will aid the district in improving the work being done in our schools. I appreciate your thorough request and the promise to maintain confidentiality in regard to our district, schools, and teachers. I commend you for your choice of topic and look forward to working with you on this study as well as sharing the results with our administrators and teachers. Please contact me if I can be of any assistance in the process.

Respectfully,

XXXXX XXXXXX

Direct of Curriculum and Instruction
XXXX XXXXXX Schools

Appendix F

Formal Letter of Permission to School District B

December 9, 2015

Dr. XXXXXX XXXXXXXX
Assistant Superintendent
XX XXXXXX XXXXXX Road
XXXXXXXXXXX, NC XXXXX

RE: Permission to Conduct Research Study

Dear Dr. XXXXXXXX,

I am currently enrolled in the Doctor of Education in Educational Leadership program at Gardner-Webb University. I am requesting permission to conduct research at XXXXX Elementary School, XXXXXX Middle School, and XXXXXXXX High School. Research will be conducted in the spring of 2016 for my study titled, *The Perceived Impact of Professional Learning Communities on Collective Teacher Efficacy in Two Rural Western North Carolina School Districts.*

The purpose of this study was to examine the perceived impact of professional learning communities on collective teacher efficacy. The Professional Learning Communities Assessment-Revised (PLCA-R) survey instrument, interviews, and focus groups will be utilized. To maintain confidentiality, names of the schools, participant information, and district will be changed.

I would like to begin data collection in January 2016. Please contact me via email at XXXXXXXX@gardner-webb.edu or phone (XXX-XXX-XXXX) regarding any thoughts, questions, or concerns you have. Your approval to conduct this study, and contribution to the data, will be valued and greatly appreciated.

Sincerely,

Katie Bailey

Appendix G

Formal Letter Granting Permission from School District B

December 10, 2015

Dear Katie Bailey,

The purpose of this letter is to inform you that XXXXXXXX XXXXXX Schools gives you permission to conduct the research titled *The Perceived Impact of Professional Learning Communities on Collective Teacher Efficacy in Two Rural Western North Carolina School Districts.* This also severs as assurance that this system complies with requirements of the Family Educational Rights and Privacy Act (FERPA) and the Protection of Pupil Rights Amendment (PPRA) and will ensure that these requirements are followed in the conduct of this research.

We also ask that you familiarize yourself and adhere to the XXXXXXXX XXXXXX School Policies pertaining research projects: Policy 5230, Participation in Research Projects; Policy 4720, Surveys of Students; Policy 4700, Student Records, and Policy 4705/7825, Confidentiality of Personal Identifying Information.

Thank you for your interest in XXXXXXXX XXXXXX Schools. We hope you are successful in your research and dissertation work. Please contact me at any time if you have any questions or concerns.

Sincerely,

XXXXXX X. XXXXXXXX, Ed. D.
Assistant Superintendent

Appendix H

Participant Consent Form

Teacher Participant Consent Form

Gardner-Webb University

You are invited to participate in a study to examine the perceived impact of professional learning communities on collective teacher efficacy in two rural western North Carolina school districts.

Research Title:

The Perceived Impact of Professional Learning Communities on Collective Teacher Efficacy in Two Rural Western North Carolina School Districts

Research Questions:

The following research questions will guide the framework for this study:

1. What are teachers' and administrators' perceptions on the impact professional learning communities have on collective teacher efficacy?

2. What are teachers' and administrators' perceptions on the effectiveness of collective learning within a professional learning community?

3. What impact do supportive conditions within professional learning communities have on collective teacher efficacy?

Procedures:

The study will be conducted during the spring semester of 2016. Teachers and administrators will be asked to complete the Professional Learning Communities Assessment-Revised (PLCA-R) survey, which will be sent out electronically. Following the survey, the researcher will conduct interviews and focus-group sessions in an attempt to triangulate the data to ensure validity and reliability. Interviewees and participants for the focus-group sessions will be randomly selected. Participants will be asked to discuss their experiences, perceptions, and beliefs regarding professional learning communities and collective teacher efficacy. The researcher will transcribe all sessions. Participants will be able to review the content for accuracy before the work is made available for others to read. Measures will be taken to protect the confidentiality of the schools and individuals that participate in the study.

By signing this consent form, I:

1. Voluntarily agree to participate in the study.
2. May not personally benefit from this study, but the knowledge gained from the study may be beneficial to others.
3. Am free to refuse to participate and to withdraw from the research study at any time without prejudice to me.
4. Understand my participation and all documents obtained from the study will not be used in an evaluative manner.
5. Acknowledge that records from this study will be kept safe and confidential.
6. Agree to participate in audio-recorded interviews with the researcher.
7. Agree to review the transcripts from the interviews for verification of accuracy, as well as contradictions, and to discuss these findings with the researcher.
8. Understand the risks from this study are small, but may include low levels of stress during the interview and observations.

If you have any questions regarding the research process or your participation in this study, please contact Katie Bailey at (XXX) XXX-XXXX or by email at XXXXXXXX@gardner-webb.edu. Again, your participation in this study is voluntary and you may withdraw from this study at any time.

Check one box:

☐ I choose to voluntarily participate in the study and have read the above information.

☐ I choose to opt-out of the study.

Printed Name of Participant

Signature of Participant **Date**

Signature of Researcher **Date**